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TRADER AND BEST-SELLING AUTHOR

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The New Trading for a Living

Psychology • Discipline
Trading Tools and Systems
and Risk Control • Trade Management

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To the memory of Lou Taylor—
a wise man, a savvy trader, and a true friend.

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PREFACE

Trading for a Living was published in 1993 and became an international best seller. It remains at the top of many reading lists, as friends recommend it to friends and trading firms give it to their new hires. All these years, I resisted revising my book because I trusted and liked its internal logic. I traded, traveled, wrote other books, and taught a few classes. Now, 21 years later, I agreed to update my most popular book so that you can benefit from the new technologies as well as the lessons I've learned.

My late great friend Lou Taylor, to whom this book is dedicated, used to joke: “If I get half a percent smarter each year, I'll be a genius by the time I die.” Revising my very first book felt like reliving my youth with the benefit of experience.

In planning this update, I thought of a building complex in Vienna, Austria called the Gasometer. At its core are multistory storage tanks, erected by Austrian bricklayers in 1927. When modern technology made huge gas cylinders obsolete, architects converted them into modern apartments. They punched wide openings in brick walls, creating panoramic views, installed floors and elevators, and added glass-enclosed penthouses. I used to stay in one of them and wanted my new book to follow that model of blending old craftsmanship with new technology.

Before you begin reading this book, ask yourself: what's the single most important step you can take to become a successful trader?

Psychology is important. Since I was actively practicing psychiatry while writing the original *Trading for a Living*, its psychology part stood the test of time and I changed it very little in this new edition.

Market analysis is very important—but remember that when we look at a chart, we deal with only five pieces of data—the open, the high, the low, the close and volume. Piling up masses of indicators and patterns on top of those

five values only increases confusion. Less is often more. If you've read *Trading for a Living*, you'll see that I've reduced the number of technical chapters and moved some of them into a downloadable addendum. On the other hand, I added several new chapters that focus on new tools, notably the Impulse system. I also added a section on stops, profit targets and other practical details.

Money management is extremely important because financial markets are hotbeds of risk. That was the weakest part of the original book, and I completely rewrote it. One of many tools you'll discover will be the Iron Triangle of risk control.

Psychology, trading tactics, and money management are the three pillars of success, but there is the fourth factor that ties them together. That factor—which integrates all others—is record-keeping.

Keeping good records will enable you to learn from your experiences. It'll help you break out of the vicious circle of small gains and big losses, running like a squirrel in a barrel, sweating and stressed but never getting anywhere. Keeping good records will make you your own teacher and a better trader. I'll show you several types of records you need to keep and will share several of my trade diaries.

If you're a new reader, welcome to the journey. If you've already read *Trading for* a *Living*, I hope you'll find this new book two decades smarter than the first.

Dr. Alexander Elder
New York–Vermont, 2014

Introduction

1. Trading—The Last Frontier

You can be free. You can live and work anywhere in the world. You can be independent from routine and not answer to anybody.

This is the life of a successful trader.

Many aspire to it but few succeed. An amateur looks at a quote screen and sees millions of dollars sparkle in front of his face. He reaches for the money—and loses. He reaches again—and loses more. Traders lose because the game is hard, or out of ignorance, or from lack of discipline. If any of these ail you, I wrote this book for you.

How I Began to Trade

In the summer of 1976, I drove from New York to California. I took along a few books on psychiatry (I was a first-year psychiatric resident), several histories, and put a paperback copy of Engel's *How to Buy Stocks* into the trunk of my old Dodge. Little did I know that a dog-eared paperback, borrowed from a lawyer friend, would in due time change the course of my life. That friend, incidentally, had a perfect reverse golden touch—any investment he touched went under water. But that's another story.

I gulped down the Engel book in campgrounds across America, finishing it on a Pacific beach in La Jolla. I had known nothing about the stock market, and the idea of making money by thinking gripped me.

I grew up in the Soviet Union in the days when it was, in the words of a former U.S. president, “an evil empire.” I hated the Soviet system and wanted to get out, but emigration was forbidden. I entered college at 16, graduated medical school at 22, completed my residency, and then took a job as a ship's doctor. Now I could break free! I jumped the Soviet ship in Abidjan, Ivory Coast.

I ran to the U.S. Embassy through the clogged dusty streets of an African port city, chased by my ex-crewmates. The embassy put me in a “safe house” and then on a plane to New York. I landed at Kennedy Airport in February 1974, arriving from Africa with $25 in my pocket. I spoke some English, but did not know a soul in this country.

I had no idea what stocks, bonds, futures, or options were and sometimes got a queasy feeling just from looking at the American dollar bills in my wallet. In the old country, a handful of them could buy you three years in Siberia.

Reading *How to Buy Stocks* opened a whole new world for me. When I returned to New York, I bought my first stock—it was KinderCare. A very bad thing happened—I made money on my first trade and then the second one, leaving me with a delusion that making money in the markets was easy. It took me a couple of years to get rid of that notion.

My professional career proceeded on a separate track. I completed a residency in psychiatry at a major university hospital, studied at the New York Psychoanalytic Institute, and served as book editor for the largest psychiatric newspaper in the United States. I still have my license, but my professional practice these days is at most an hour or two per month. I am busy trading, love traveling, and do some teaching.

Learning to trade has been a long journey—with soaring highs and aching lows. In moving forward—or in circles—I repeatedly knocked my head against the wall and ran my trading account into the ground. Each time I returned to a hospital job, put a stake together, read, thought, did more testing, and then started trading again.

My trading slowly improved, but the breakthrough came when I realized that the key to winning was inside my head and not inside a computer. Psychiatry gave me the insight into trading that I will share with you.

Do You Really Want to Succeed?

For many years I had a friend whose wife was fat. She was an elegant dresser, and she had been on a diet for as long as I had known her. She said she wanted to lose weight and she didn't eat cake or potatoes in front of people—but when I came into her kitchen, I'd see her go at it with a big fork. She said she wanted to be slim, but remained fat.

The short-term pleasure of eating was stronger for her than the delayed pleasure and health benefits of weight loss. My friend's wife reminded me of a great many traders who say they want to be successful but keep making impulsive trades—going for the short-term thrills of gambling in the markets.

People deceive and play games with themselves. Lying to others is bad, but lying to yourself is hopeless. Bookstores are full of good books on dieting, but the world is still full of overweight people.

This book will teach you how to analyze and trade the markets, control risks, and deal with your own mind. I can give you the knowledge. Only you can supply the motivation.

And remember this: an athlete who wants to enjoy risky sports must follow safety rules. When you reduce risks, you gain an added sense of accomplishment and control. The same goes for trading.

You can succeed in trading only if you handle it as a serious intellectual pursuit. Emotional trading is lethal. To help ensure success, practice defensive money management. A good trader watches his capital as carefully as a professional scuba diver watches his air supply.

2. Psychology Is the Key

Remember how you felt the last time you placed an order? Were you anxious to jump in or afraid of losing? Did you procrastinate before entering your order? When you closed out a trade, did you feel elated or humiliated? The feelings of thousands of traders merge into huge psychological tides that move the markets.

Getting Off the Roller Coaster

The majority of traders spend most of their time looking for good trades. Once they enter a trade, they don't manage it but either squirm from pain or grin from pleasure. They ride an emotional roller coaster and miss the essential element of winning—the management of their emotions. Their inability to manage themselves leads to poor risk management and losses.

If your mind is not in gear with the markets, or if you ignore changes in mass psychology of crowds, you have no chance of making money trading. All winning professionals know the enormous importance of psychology. Most losing amateurs ignore it.

Friends and students who know that I am a psychiatrist often ask whether this helps me as a trader. Good psychiatry and good trading have one important principle in common. Both focus on reality, on seeing the world the way it is. To live a healthy life, you have to live with your eyes open. To be a good trader, you need to trade with your eyes open, recognize real trends and turns, and not waste time or energy on fantasies, regrets, and wishful thinking.

A Man's Game?

Brokerage house records indicate that most traders are male. The files of my firm, Elder.com, confirm that approximately 85 to 90 percent of traders are male. The percentage of women traders among my clients, however, has more than doubled since the original edition of *Trading for a Living* was written twenty years ago.

The English language being what it is, “he” flows better than “he or she” or jumping between the two pronouns. To make reading easier, I'll use the

masculine pronoun throughout this book. Of course, no disrespect is intended to the many women traders.

As a matter of fact, I find that the percentage of successful traders is higher among women. As a group, they tend to be more disciplined and less arrogant than men.

How This Book Is Organized

The three pillars of successful trading are psychology, market analysis, and risk management. Good record-keeping ties them together. This book will help you learn the essentials of all these areas.

Part One of this book will show you how to manage emotions in trading. I discovered this method while practicing psychiatry. It greatly improved my trading, and it can help you too.

Part Two will focus on crowd psychology of the markets. Mass behavior is more primitive than that of individuals. If you understand how crowds behave, you'll be able to profit from their mood swings instead of being swept up in their emotional tides.

Part Three will show how chart patterns reflect crowd behavior. Classical technical analysis is applied social psychology, like poll-taking. Support, resistance, breakouts, and other patterns reflect crowd behavior.

Part Four will teach you modern methods of computerized technical analysis. Indicators provide a better insight into mass psychology than classical chart patterns. Trend-following indicators help identify market trends, while oscillators show when those trends are ready to reverse.

Volume and open interest also reflect crowd behavior. Part Five will focus on them as well as on the passage of time in the markets. Crowds have short attention spans, and a trader who relates price changes to time gains a competitive advantage.

Part Six will focus on the best tools for analyzing the stock market as a whole. They can be especially helpful for stock index futures and options traders.

Part Seven will present several trading systems. We'll begin with the Triple Screen, which has become widely accepted, and then review the Impulse and Channel trading systems.

Part Eight will discuss several classes of trading vehicles. It will outline pluses and minuses of equities, futures, options, and forex, while blowing away the promotional fog that clouds some of these markets.

Part Nine will lead you into the all-important topic of money management. This essential aspect of successful trading is neglected by most amateurs. You can have a brilliant trading system, but if your risk management is poor, then a short string of losses will destroy your account. Armed with the Iron Triangle of risk control and other tools, you'll become a safer and more effective trader.

Part Ten will delve into the nitty-gritty of trading—setting stops, profit targets, and scanning. These practical details will help you implement any system you like.

Part Eleven will guide you through the principles and templates of good record-keeping. The quality of your records is the single best predictor of your success. I'll offer you free downloads of the templates I like to use.

Last but not least, this book has a separate Study Guide. It asks over 100 questions, each linked to a specific section of the book. All questions are designed to test your level of understanding and discover any blind spots. After you finish reading each section of this book, it'll make sense to turn to the Study Guide and answer questions relevant to that section. If test results turn out to be less than excellent, don't hurry, reread that section of the book, and retake the test.

You are about to spend many hours with this book. When you find ideas that look important to you, test them in the only way that matters—on your own market data and in your own trading. You will make this knowledge your own only by questioning and testing it.

3. The Odds against You

Why do most traders lose and wash out of the markets? Emotional and mindless trading are big reasons, but there is another. Markets are actually set up so that most traders must lose money. The trading industry slowly kills traders with commissions and slippage.

You pay commissions for entering and exiting trades. Slippage is the difference between the price at which you place your order and the price at which it gets filled. When you place a limit order, it is filled at your price or better, or not at all. When you feel eager to enter or exit and place a market order, it's often filled at a worse price than prevailed when you placed it.

Most amateurs are unaware of the harm done by commissions and slippage, just as medieval peasants could not imagine that tiny invisible germs could kill them. If you ignore slippage and deal with a broker who charges high commissions, you're acting like a peasant who drinks from a communal pool during a cholera epidemic.

The trading industry keeps draining huge amounts of money from the markets. Exchanges, regulators, brokers, and advisors live off the markets, while generations of traders keep washing out. Markets need a fresh supply of losers just as builders of the ancient pyramids needed a fresh supply of slaves. Losers bring money into the markets, which is necessary for the prosperity of the trading industry.

A Minus-Sum Game

Winners in a zero-sum game make as much as losers lose. If you and I bet $20 on the direction of the next 100-point move in the Dow, one of us will collect $20 and the other will lose $20. A single bet has a component of luck, but the more knowledgeable person will keep winning more often than losing over a period of time.

People buy the industry's propaganda about trading being a zero-sum game, take the bait, and open accounts. They don't realize that trading is a *minus*-sum game. Winners receive less than what losers lose because the industry drains money from the markets.

For example, roulette in a casino is a minus-sum game because the casino sweeps away between three and six percent of every bet. This makes roulette

unwinnable in the long run. You and I can get into in a minus-sum game if we make the same $20 bet on the next 100-point move in the Dow through brokers. When we settle, the loser will be out $23, and the winner will collect only $17, while two brokers will smile on their way to the bank.

Commissions and slippage are to traders what death and taxes are to all of us. They take some fun out of life and ultimately bring it to an end. A trader must support his broker and the machinery of exchanges before he collects a dime. Being simply “better than average” is not good enough. You have to be head and shoulders above the crowd to win a minus-sum game.

Commissions

Commissions have become much smaller in the past two decades. Twenty years ago, there were still brokers who charged one-way commissions of between half a percent and one percent of trade value. Buying a thousand shares of GE at $20 a share, with a total value of $20,000, would have set you back $100 to $200 on the way in—and again on the way out. Fortunately for traders, commission rates have plummeted.

The extortionate rates haven't completely disappeared. While preparing this book for publication, I received an e-mail from a client in Greece with a small account whose broker—a major European bank—charged him a $40 minimum on any trade. I told him of my broker whose minimum for a hundred shares is only $1.

Without proper care, even seemingly small numbers can raise a tall barrier to success.

Look at a fairly active trader with a $20,000 account, doing one roundtrip trade per day, four days a week. Paying $10 one way, by the end of the week he'll spend $80 in commissions: $40 for entries and $40 for exits. If he does that 50 weeks per year (if he lasts that long), by the end of the year he will have spent $4,000 on commission. That would be 20% of his account!

George Soros, a top money manager, delivers an average 29% annual return. He wouldn't be where he is if he paid 20% a year in commissions! Even a “small commission” can build up a major barrier to success! I've heard brokers chuckle as they gossiped about clients who beat their brains out just to stay even with the game.

Shop for the lowest possible commissions. Don't be shy about bargaining for lower rates. I've heard many brokers complain about a shortage of customers—but not many customers complain about the shortage of brokers. Tell your broker it is in his best interest to charge you low commissions because you will survive and remain a client for a long time. Design a trading system that will trade less often.

In my own trading, I maintain one major account with a broker who charges me $7.99 for unlimited size trades and another with a broker who charges a penny a share, with a $1 minimum. When I trade expensive stocks, where I buy fewer than 800 shares, I give that order to the penny-a-share broker; otherwise, I go with the $7.99-per-trade broker. A beginning trader, making his first steps, should look for a penny-a-share broker. Then you can trade your 100 shares for a dollar. A futures trader can expect to pay just a couple of dollars for a roundtrip trade.

Slippage

Slippage means having your orders filled at a different price than what you saw on the screen when you placed your order. It is like paying 50 cents for an apple in a grocery store even though the posted price is 49 cents. A penny is nothing—but if you're buying a thousand apples or a thousand shares with a penny slippage, it'll come to $10 per order, probably greater than your commission.

There are two main types of orders: market and limit. Your slippage depends on which of these types you use.

A limit order says—‘give me that apple at 49 cents.’ It guarantees the price, but doesn't guarantee a fill. You'll pay no more than 49 cents, but you may end up without the apple that you wanted.

A market order says—‘give me that apple.’ It guarantees a fill, but doesn't guarantee the price. If prices of apples are rising when you place your order, you may well pay more than you saw on the screen when you pushed the buy button. You may get hit by slippage.

Slippage on market orders rises with market volatility. When the market begins to run, slippage goes through the roof.

Do you have any idea how much slippage costs you?

There is only one way to find out: write down the price at the time you placed a market order, compare it with your fill, and multiply the difference by the number of shares or contracts. Needless to say, you need a good record-keeping system, such as a spreadsheet with columns for each of the above numbers. We offer such a spreadsheet to traders as a public service at www.elder.com.

You'll be reading “record this” and “record that” throughout this book. Remember that good record-keeping is essential for your success. You have to keep an eye on your wins and an even sharper eye on your losses because you can learn much more from them.

Here's a shocking number, which you can confirm by keeping good records: an average trader spends three times more on slippage than on commissions.

Earlier we talked about commissions raising a barrier to success. The barrier from slippage is three times higher. This is why, no matter how tempting a trade, you need to avoid buying “at the market.”

You want to be in control and trade only at prices that suit you. There are thousands of stocks and dozens of futures contracts. If you miss a trade due to a limit order, there'll be countless other opportunities. Do not overpay! I almost always use limit orders and resort to market orders only when placing stops. When a stop level gets hit, it becomes a market order. When a trade is flaming out, it's not the time to economize. Get in slow but get out fast.

To reduce slippage, trade liquid, high-volume markets and avoid thinly traded stocks, where slippage tends to be higher. Go long or short when the market is quiet, and use limit orders to buy or sell at specified prices. Keep a record of prices at the time you placed your order. Demand your broker fight the floor for a better fill when necessary.

Bid-Ask Spreads

Whenever the market is open, there are always two prices for any trading vehicle—a bid and an ask. A bid is what people are offering to pay for that security at that moment; an ask is what sellers are demanding in order to sell it. A bid is always lower, an ask higher, and the spread between them keeps changing.

Bid-ask spreads vary between different markets and even in the same market at different times. Bid-ask spreads are higher in thinly traded vehicles, as the

pros who dominate such markets demand high fees from those who want to join their party. The bid-ask spreads are likely to be razor-thin, perhaps only one tick on a quiet day in an actively traded stock, future or option. They grow wider as prices accelerate on the way up or down and may become huge—dozens of ticks—after a severe drop or a very sharp rally.

Market orders get filled at the bad side of bid-ask spreads. A market order buys at the ask (high) and sells at the bid (low). Little wonder that many professional traders make a good living from filling market orders. Don't feed the wolves—use limit orders whenever possible!

The Barriers to Success

Slippage and commissions make trading similar to swimming in a piranha-infested river. Other expenses also drain traders' money. The cost of computers and data, fees for advisory services and books—including the one you are reading now—all come out of your trading funds.

Look for a broker with the cheapest commissions and watch him like a hawk. Design a trading system that gives signals relatively infrequently and allows you to enter markets during quiet times. Use limit orders almost exclusively —except when placing stops. Be careful on what tools you spend money: there are no magic solutions. Success cannot be bought, only earned.

PART 1

Individual Psychology

4. Why Trade?

Trading appears deceptively easy. A beginner may cautiously enter the market, win a few times, and start feeling brilliant and invincible. That's when he starts taking wild risks and ends up with bad losses.

People trade for many reasons—some rational and many irrational. Trading offers an opportunity to make a lot of money in a hurry. Money symbolizes freedom to many people, even though they often don't know what to do with it.

If you know how to trade, you can make your own hours, live and work anywhere you please, and never answer to a boss. Trading is a fascinating game: chess, poker, and a video game rolled into one. Trading attracts people who love challenges.

It attracts risk-takers and repels those who avoid risk. An average person gets up in the morning, goes to work, has a lunch break, returns home, has a beer and dinner, watches TV, and goes to sleep. If he makes a few extra dollars, he puts them into a savings account. A trader keeps odd hours and puts his capital at risk. Many traders are loners who abandon the certainties of the routine and take a leap into the unknown.

Self-Fulfillment

Many people have an innate drive to achieve their personal best, to develop their abilities to the fullest. This drive, along with the pleasure of the game and the lure of money, propels traders to challenge the markets.

Good traders tend to be hardworking and shrewd people, open to new ideas. The goal of a good trader, paradoxically, is not to make money. His goal is to trade well. If he trades right, money follows almost as an afterthought. Successful traders keep honing their skills as they try to reach their personal best.

A professional trader from Texas invited me to his office and said: “If you sit across the table from me while I day-trade, you won't be able to tell whether I am $2,000 ahead or $2,000 behind on that day.” He has risen to a level where winning does not elate him and losing does not deflate him. He is so focused on trading right and improving his skills that money no longer influences his emotions.

The trouble with self-fulfillment is that many people have self-destructive streaks. Accident-prone drivers keep destroying their cars, and self-destructive traders keep destroying their accounts. Markets offer vast opportunities for self-sabotage, as well as for self-fulfillment. Acting out your internal conflicts in the marketplace is a very expensive proposition.

Traders who are not at peace with themselves often try to fulfill their contradictory wishes in the markets. If you don't know where you are going, you'll wind up somewhere you never wanted to be.

5. Reality versus Fantasy

If a friend with little farming experience told you that he planned to feed himself with food grown on a quarter-acre (1,000 square meters) plot, you'd expect him to go hungry. One can squeeze only so much from a small piece of land. There is, however, a field in which grown-ups let their fantasies fly —in trading.

A former employee told me that he planned to support himself trading a $6,000 account. When I tried to show him the futility of his plan, he quickly changed the topic. He was a bright analyst, but refused to see that his “intensive farming” plan was suicidal. In his desperate effort to succeed, he'd have to take on large positions—and the slightest wiggle of the market will quickly put him out of business.

A successful trader is a realist. He knows his abilities and limitations. He sees what's happening in the markets and knows how to react. He analyzes the markets without cutting corners, observes himself, and makes realistic plans. A professional trader cannot afford illusions.

Once an amateur takes a few hits and gets a few margin calls, he swings from cocky to fearful and starts developing strange ideas about the markets. Losers buy, sell, or avoid trades due to their fantastic ideas. They act like children who are afraid to pass a cemetery or look under their bed at night because they are afraid of ghosts. The unstructured environment of the market makes it easy to develop fantasies.

Most people who grow up in Western civilization have several similar fantasies. They are so widespread that when I studied at the New York Psychoanalytic Institute, there was a course called “Universal Fantasies.” For example, many people have a fantasy in childhood that they were adopted. This fantasy seems to explain the unfriendly and impersonal world. It consoles a child but prevents him from being aware of a reality he'd rather not see—that his parents aren't that good. Our fantasies influence our behavior, even if we aren't consciously aware of them.

In talking to hundreds of traders, I keep hearing several universal fantasies. They distort reality and stand in the way of trading success. A successful trader must identify his fantasies and get rid of them.

The Brain Myth

Losers who suffer from the “brain myth” will tell you, “I lost because I didn't know trading secrets.” Many have a fantasy that successful traders have some secret knowledge. That fantasy helps support a lively market in advisory services and ready-made trading systems.

A demoralized trader may whip out his credit card to buy access to “trading secrets.” He may send money to a charlatan for a $3,000 “can't miss,” backtested, computerized trading system. When that system self-destructs, he'll pull out his almost-maxed-out credit card again for a “scientific manual” that explains how he can stop losing and begin winning by contemplating the moon, the stars, or even Uranus.

At an investment club we used to have in New York, I often ran into a famous financial astrologer. He often asked for free admission because he couldn't afford to pay a modest fee for the meeting and a meal. His main source of income remains collecting money for astrological trading predictions from hopeful amateurs.

Losers don't realize that trading is intellectually fairly simple. It is nowhere near as demanding as taking out an appendix, building a bridge, or trying a case in court. Good traders are shrewd, but few are intellectuals. Many have never been to college, and some have dropped out of high school.

Intelligent and hardworking people who have succeeded in their careers often feel drawn to trading.

Why do they fail so often? What separates winners from losers isn't intelligence or secrets, and certainly not education.

The Undercapitalization Myth

Many losers think that they would trade successfully if they had a bigger account.

People destroy their accounts either by a string of losses or a single abysmally bad trade. Often, after the loser is sold out, unable to meet a margin call, the market reverses and moves in the direction he expected. He starts fuming: had he survived another week, he would have made a fortune instead of losing!

Such people look at market reversals that come too late and think that those turns confirm their methods. They may go back to work and earn, save, or borrow enough money to open another small account. History repeats itself: The loser gets wiped out, the market reverses and “proves” him right, but only too late—he's been sold out again. That's when the fantasy is born: “If only I had a bigger account, I could have stayed in the market longer and won.”

Some losers raise money from relatives and friends by showing them a paper track record. It seems to prove that they would have won big, if only they had had more money to work with. But even if they raise more money, they lose that, too—as if the market were laughing at them!

A loser is not undercapitalized—his mind is underdeveloped. A loser can destroy a big account almost as quickly as a small one. An acquaintance of mine once blew out over 200 million dollars in a day. His broker sold him out—and then the market turned. He sued the broker and said to me: “If only I had a bigger account….” Apparently an account with $200 million wasn't big enough.

A loser's true problem is not account size but overtrading and sloppy money management. He takes risks that are too big for his account size, however small or big. No matter how good his system may be, a streak of bad trades is sure to put him out of business.

Amateurs neither expect to lose nor are prepared to manage losing trades. Calling themselves undercapitalized is a cop-out that helps them avoid two painful truths: their lack of a realistic money management plan and lack of discipline.

A trader who wants to survive and prosper must control losses. You do that by risking only a tiny fraction of your equity on any single trade (see Section Nine, “Risk Management”). Learn from cheap mistakes in a small account.

The one advantage of a large trading account is that the price of equipment and services represents a smaller percentage of your money. The owner of a million-dollar fund who spends $5,000 on classes is only ½ percent behind the game. The same expenditure would represent a deadly 25 percent of equity for a trader with a $20,000 account.

The Autopilot Myth

Traders who believe in the autopilot myth think that the pursuit of wealth can be automated. Some people try to develop an automatic trading system, while others buy systems from vendors. Men who have spent years honing their skills as lawyers, doctors, or businessmen plunk down thousands of dollars for canned competence. Most are driven by greed, laziness, and mathematical illiteracy.

Systems used to be written on sheets of paper, but now they get downloaded on a computer. Some are primitive; others are elaborate, with built-in optimization and even money management rules. Many traders spend thousands of dollars searching for magic that will turn a few pages of computer code into an endless stream of money. People who pay for automatic trading systems are like medieval knights who paid alchemists for the secret of turning base metals into gold.

Complex human activities do not lend themselves to automation. Computerized learning systems have not replaced teachers, and programs for doing taxes haven't created unemployment among accountants. Most human activities call for an exercise of judgment; machines and systems can help but not replace humans.

Had there been a successful automatic trading system, its purchaser could move to Tahiti and spend the rest of his life at leisure, supported by a stream of checks from his broker. So far, the only people who've made money from trading systems are their sellers. They form a small but colorful cottage industry. If their systems worked, why would they sell them? They could move to Tahiti themselves and cash checks from their brokers! Meanwhile, every system seller has a line. Some say they like programming better than trading. Others claim that they sell their systems only to raise capital or even out of love for humanity.

Markets are always changing and defeating automatic trading systems. Yesterday's rigid rules will work less well today and will probably stop working tomorrow. A competent trader can adjust his methods when he detects trouble. An automatic system is less adaptable and self-destructs.

Airlines pay high salaries to pilots despite having autopilots. They do it because humans can handle unforeseen events. When a roof blows off an airliner over the Pacific or when a passenger jet loses both engines to a flock of geese over Manhattan, only a human can handle such crises. These emergencies have been reported in the press, and in each of them,

experienced pilots managed to land their airliners by improvising solutions. No autopilot can do that. Betting your money on an automatic system is like betting your life on an autopilot. The first unexpected event will make your account crash and burn.

There are good trading systems out there, but they have to be monitored and adjusted using individual judgment. You have to stay on the ball—you cannot abdicate responsibility for your success to a mechanical system.

Traders with autopilot fantasies try to repeat what they felt as infants. Their mothers used to fulfill their needs for food, warmth, and comfort. Now they try to recreate the experience of passively lying on their backs and having profits flow to them like an endless stream of free, warm milk. The market is not your mother. It consists of tough men and women who look for ways to take money from you rather than pouring warm milk into your mouth.

The Cult of Personality

Most people pay lip service to their wish for freedom and independence, but when they come under pressure, they change their tune and start looking for "strong leadership." Traders in distress often seek directions from assorted gurus.

When I was growing up in the former Soviet Union, children were taught that Stalin was our great leader. Later we found out what a monster he was, but while he was alive, most people enjoyed following the leader. He freed them from the need to think for themselves.

"Little Stalins" were installed in every area of society—in economics, biology, architecture, and so on. When I came to the United States and began to trade, I was amazed to see how many traders were looking for a guru—their own "little Stalin." The fantasy that someone else can make you rich is always with us.

There are three types of gurus in the financial markets: market cycle gurus, magic method gurus, and dead gurus. Cycle gurus call important market turns. Method gurus promote new highways to riches. Still others have escaped criticism and invited cult following through the simple mechanism of departing this world.

Market Cycle Gurus

For many decades, the U.S. stock market has generally followed a four-year cycle. The broad stock market has normally spent 2.5 or 3 years going up and 1 or 1.5 years going down. A new market cycle guru emerges in almost every major stock cycle, once every 4 years. A guru's fame tends to last for 2 to 3 years. The reigning period of each guru coincides with a major bull market in the United States.

A market cycle guru forecasts rallies and declines. Each correct forecast increases his fame and prompts even more people to buy or sell when he issues his pronouncements. A market cycle guru has a pet theory about the market. That theory—cycles, volume, Elliott Wave, whatever—is usually developed several years prior to reaching stardom. At first, the market refuses to follow an aspiring guru's pet theory. Then the market changes and for several years comes in gear with the guru's calls. That is when the guru's star rises high above the marketplace.

Compare this to what happens to fashion models as public tastes change. One year, blondes are popular, another year, redheads. Suddenly, last year's blonde star is no longer wanted for the front cover of a major magazine. Everybody wants a dark model, or a woman with a birthmark on her face. A model doesn't change—public tastes do.

Gurus always come from the fringes of market analysis. They are never establishment analysts. Institutional employees play it safe—afraid to stick their necks out—and almost never achieve spectacular results. A market cycle guru is an outsider with a unique theory.

A guru remains famous for as long as the market behaves according to his the–ory—usually for less than the duration of one 4-year market cycle. At some point, the market changes and starts marching to a different tune. A guru continues to use old methods that worked so well in the past and loses his following. When the guru's forecasts stop working, public admiration turns to hatred. It's impossible for a discredited market cycle guru to return to stardom.

All market cycle gurus have several traits in common. They become active in the forecasting business several years prior to reaching stardom. Each has a unique theory, a few followers, and some credibility, conferred by sheer survival in the advisory business. The fact that each guru's theory did not work for a number of years is ignored by his followers. When the theory

becomes correct, the mass media take notice. When a theory stops working, mass adulation turns to hatred.

When you recognize that a successful new guru is emerging, it may be profitable to jump on his bandwagon. It's even more important to recognize when a guru has reached his peak. All gurus crash—and by definition, they crash from the height of their fame. When a guru becomes accepted by the mass media, it's a good sign that he has reached his crest. The mainstream media is wary of outsiders. When several mass magazines devote space to a hot market guru, you know that his end is near. Mass psychology being what it is, new gurus will continue to emerge.

Magic Method Gurus

While cycle gurus are creatures of the stock market, “method gurus” are more prominent in the derivatives markets. A “method guru” erupts on the financial scene after discovering a new analytic or trading method.

Traders always look for an edge, an advantage over fellow traders. Like knights shopping for swords, they are willing to pay handsomely for their trading tools. No price is too high if it lets them tap into a money pipeline.

A magic method guru sells a new set of keys to market profits—speedlines, cycles, Market Profile, etc. It may have an edge in the beginning, but as soon as enough people become familiar with a new method and test it in the markets, it inevitably deteriorates and starts losing popularity. Markets are forever grinding down each method's edge, and what worked yesterday is less likely to work today and highly unlikely a year from now.

Oddly enough, even in this era of global communications, reputations change slowly. A guru whose image has been destroyed in his own country can make money peddling his theory overseas. That point has been made to me by a guru who compared his continued popularity in Asia to what happens to faded American singers and movie stars. They are unable to attract an audience in the United States, but they can still make a living singing abroad.

Dead Gurus

The third type of a market guru is a dead guru. His books are reissued, his market courses are scrutinized by new generations of eager traders, and the legend of the dear-departed analyst's prowess and personal wealth grows

posthumously. The dead guru is no longer among us and cannot capitalize on his fame. Other promoters profit from his reputation and expired copyrights. One dear-departed guru is R. N. Elliott, but the best example of such a legend is W. D. Gann.

Various opportunists sell “Gann courses” and “Gann software.” They claim that Gann was one of the best traders who ever lived, that he left a $50 million estate, and so on. I interviewed W. D. Gann's son, an analyst for a Boston bank. He told me that his famous father could not support his family by trading but earned his living by writing and selling instructional courses. He could not afford a secretary and made his son work for him. When W. D. Gann died in the 1950s, his estate, including his house, was valued at slightly over $100,000. The legend of W. D. Gann, the giant of trading, is perpetuated by those who sell courses and other paraphernalia to gullible customers.

The Followers of Gurus

A guru has to produce original research for several years, then get lucky when the market turns his way. While some gurus are dead, those who are alive range from serious academic types to great showmen. To read about scandals surrounding many gurus, try *Winner Takes All* by William R. Gallacher.

When we pay a guru, we expect to get back more than we spend. We act like a man who bets a few dollars against a three-card Monte dealer on a street corner. He hopes to win more than he put down on an overturned crate. Only the ignorant or greedy take the bait.

Some people turn to gurus in search of a strong leader. They look for a parent-like omniscient provider. As a friend once said, “They walk with their umbilical cords in hand, looking for a place to plug them in.” A smart promoter provides such a receptacle, for a fee.

The public wants gurus, and new gurus will come. As an intelligent trader, you must realize that in the long run, no guru is going to make you rich. You have to work on that yourself.

Occasionally, when I give a talk or appear on TV, someone introduces me as a “famous guru.” I shudder at those words and interrupt such introductions. A guru is someone claiming to lead the crowds across the desert for a donation. No such pitches here!

I always begin by explaining that there are no magic methods, that the field of trading is as huge and diverse as that of medicine, where one needs to choose one specialty and work hard to become good at it. I chose my path a long time ago, and what I do in front of a class is simply think out loud, sharing my modes of research and decision making.

Trade with Your Eyes Open

Wishful thinking is stronger than dollars. Recent research has proven that people have a prodigious ability to lie to themselves and avoid seeing the truth.

Duke University professor Dan Ariely describes a clever experiment. A group of people are given an intelligence test, but half of them are "accidentally" shown a response sheet, allowing them to look up correct answers before recording their own. Needless to say, they score above the rest. Next, everybody is asked to predict their grades on the next IQ test, in which there will be absolutely no cheat sheets—and those who predict correctly will get paid. Surprisingly, the half of the group that scored higher with cheat sheets predicted higher results for the next test. The cheaters wanted to believe they were very smart, even though their incorrect predictions of success would cost them money.

A successful trader cannot afford wishful thinking—he must be a realist. There are no cheat sheets in the markets—you can see the truth in your trade diaries and equity curves.

To win in the markets, we need to master three essential components of trading: sound psychology, a logical trading system, and an effective risk management plan. These are like three legs of a stool—remove one and the stool will fall. It is a typical beginner mistake to focus exclusively on indicators and trading systems.

You have to analyze your feelings as you trade to make sure that your decisions are sound. Your trades must be based on clearly defined rules. You have to structure your money management so that no string of losses can kick you out of the game.

6. Self-Destructiveness

Trading is a very hard game. A trader who wants to win and remain successful in the long run has to be extremely serious about his craft. He cannot afford to be naive or to trade because of some hidden psychological agenda.

Unfortunately, trading often appeals to impulsive people, gamblers, and those who feel that the world owes them a living. If you trade for the excitement, you'll inevitably take trades with bad odds and accept needless risks. The markets are unforgiving, and emotional trading always results in losses.

Gambling

Gambling means betting on games of chance or skill. It exists in all societies, and most people have gambled at some point in their lives.

Freud believed that gambling was universally attractive because it was a substitute for masturbation. The repetitive and exciting activity of the hands, the irresistible urge, the resolutions to stop, the intoxicating quality of pleasure, and the feelings of guilt link gambling and masturbation.

Dr. Ralph Greenson, a prominent California psychoanalyst, has divided gamblers into three groups: the normal person who gambles for diversion and who can stop when he wishes; the professional gambler, who selects gambling as his means of earning a livelihood; and the neurotic gambler, who gambles because he is driven by unconscious needs and is unable to stop.

A neurotic gambler either feels lucky or wants to test his luck. Winning gives him a sense of power. He feels pleased, like a baby feeding at a breast. In the end, a neurotic gambler always loses because he tries to recreate that omnipotent feeling of bliss instead of concentrating on a realistic long-term game plan.

Dr. Sheila Blume, director of the compulsive gambling program at South Oaks Hospital in New York, called gambling “an addiction without a drug.” Most gamblers are men who gamble for the action. Women tend to gamble as a means of escape. Losers usually hide their losses and try to look and act like winners, but are plagued by self-doubt.

Trading stocks, futures, and options gives a gambler a high, while looking more respectable than betting on the ponies. Gambling in the financial markets has a greater aura of sophistication than playing numbers with a bookie.

Gamblers feel happy when trades go in their favor. They feel terribly low when they lose. They differ from successful professionals who focus on long-term plans and don't get particularly upset or excited over any single trade.

The key sign of gambling is the inability to resist the urge to bet. If you feel that you are trading too much and the results are poor, stop trading for a month. This will give you a chance to re-evaluate your trading. If the urge to trade is so strong that you cannot stay away from the action for a month, then it is time to visit your local chapter of Gamblers Anonymous or start using the principles of Alcoholics Anonymous, outlined later in this chapter.

Self-Sabotage

After practicing psychiatry for decades, I became convinced that most failures in life are due to self-sabotage. We fail in our professional, personal, and business affairs not because of bad luck or incompetence, but to fulfill an unconscious wish to fail.

A brilliant friend of mine had a lifelong history of demolishing his success. As a young man, he was a successful pharmacist but lost his business; became a broker and rose near the top of his firm but was sued; turned to trading but busted out while disentangling himself from previous disasters. He blamed all his failures on envious bosses, incompetent regulators, and an unsupportive wife.

Finally, he hit bottom. He had no job and no money. He borrowed a quote terminal from another busted-out trader and raised capital from a few people who had heard that he had traded well in the past. He started making money for his pool, and as the word spread, more people invested. My friend was on a roll. At that point, he went on a speaking tour of Asia but continued to trade from the road. He took a side trip into a country famous for its brothels, leaving a very large open position in bond futures, with no protective stop. By the time he returned to civilization, the market had staged a major move and his pool was wiped out. Did he try to figure out his problem? To learn? No—he blamed his broker! Afterwards I helped him get

an attractive job at a major data company, but there he began to bite the hands that fed him and was fired. In the end, this brilliant man was going door to door, selling aluminum siding—while others made money using his techniques.

When traders get in trouble, they tend to blame others, bad luck, or anything else. It hurts to look within yourself for the cause of your failure.

A prominent trader came to me for a consultation. His equity was being demolished by a rally in the U.S. dollar, in which he was heavily short. He had grown up fighting an abusive and arrogant father. He had made a name for himself by betting large positions on reversals of established trends. This trader kept adding to his short position because he could not admit that the market, which represented his father, was bigger and stronger than he was.

These are just two examples of how people act out their self-destructive tendencies. We sabotage ourselves by acting like impulsive children rather than intelligent adults. We cling to our self-defeating patterns. They can be treated—failure is a curable disease.

The mental baggage from childhood can prevent you from succeeding in the markets. You have to identify your weaknesses and work to change. Keep a trading diary—write down your reasons for entering and exiting every trade. Look for repetitive patterns of success and failure.

The Demolition Derby

All society members make small allowances to protect one another from the consequences of their mistakes. When you drive, you try to avoid hitting other cars, and they try to avoid hitting you. If someone cuts in front of you on a highway, you may curse, but you will slow down. If someone swings open the door of a parked car, you swerve. You avoid collisions because they are costly for both parties.

Almost all professions provide safety nets for their members. Your bosses, colleagues, and clients will warn you when you behave badly or self-destructively. There is no such safety net in trading, which makes it more dangerous than most human endeavors. The markets offer endless opportunities to self-destruct.

Buying at the high point of the day is like swinging your car door open into the traffic. When your order to buy reaches the floor, traders rush to sell to

you—to tear off your door along with your arm. Other traders want you to fail because when you lose they get your money.

Markets operate without normal human helpfulness. Every trader gets hit by others. Every trader tries to hit others. The trading highway is littered with wrecks. Trading is the most dangerous human endeavor, short of war.

Controlling Self-Destructiveness

Most people go through life making the same mistakes decade after decade. Some structure their lives to succeed in one area, while acting out their internal conflicts in another.

You need to be aware of your tendency to sabotage yourself. Stop blaming your losses on bad luck or on others, and take responsibility for your results. Start keeping a diary—a record of all your trades, with reasons for entering and exiting them. Look for repetitive patterns of success and failure. Those who don't learn from the past are condemned to repeat it.

A trader needs a psychological safety net the way a mountain climber needs his survival gear. I found the principles of Alcoholics Anonymous, outlined below, to be of great help at an early stage of trader development. Strict money management rules also provide a safety net, while the diary helps you learn from your mistakes as well as successes.

7. Trading Psychology

Your success or failure as a trader depends on your emotions. You may have a brilliant trading system, but if you feel arrogant, frightened, or upset, your account is sure to suffer. If you become aware of fear, greed, or a gambler's high, close your trades.

In trading, you compete against the sharpest minds in the world. Commissions and slippage slant the field against you. Now, on top of that, if you allow your emotions to interfere with your trading, the battle is lost. My friend and partner in SpikeTrade.com Kerry Lovvorn is fond of repeating: “It is hard enough to know what the market is going to do; if you don't know what you are going to do, the game is lost.”

Having a good trading system is not enough. Many traders with good systems wash out because psychologically they are not prepared to win.

Bending the Rules

Markets offer enormous temptations, like walking through a gold vault or through a harem. They provoke great surges of greed and even greater waves of fear of losing what we've got. Those feelings cloud our perceptions of market reality.

Most amateurs feel like geniuses after a short winning streak. It is exciting to believe that you are so good that all your trades are sure to be winners. That's when traders start deviating from their rules and damage their accounts.

Traders gain some knowledge, win, their emotions kick in, and they self-destruct. Most traders promptly give their “killings” back to the markets, which are full of rags to riches to rags stories. The hallmark of a successful trader is the ability to accumulate equity.

You need to make trading as objective as possible. Be sure to follow money management rules. Keep a spreadsheet listing all your trades, including commissions and slippage. Keep a diary of all your trades with “before and after” charts. At the early stages of your trading career, you may have to devote as much energy to analyzing yourself as analyzing the markets.

When I was learning to trade, I read every book on trading psychology I could find. Many writers offered sensible advice. Some stressed discipline: “You cannot let the markets sway you. Don't make decisions during trading hours. Plan a trade, and trade a plan.” Others stressed flexibility: “Don't enter the market with any preconceived notions. Change your plans when markets change.” Some experts suggested isolation—no business news, no *Wall Street Journal*, no listening to other traders, just you and the market. Others advised being open-minded, keeping in touch with other traders, and soaking up fresh ideas. Each piece of advice seemed to make sense, but they contradicted one another.

I kept reading, trading, and focusing on system development. I also continued to practice psychiatry. I never thought the two fields were connected—until I had a sudden insight. The idea that changed how I trade came from psychiatry.

The Insight That Changed My Trading

Like most psychiatrists, I always had some patients with alcohol problems. I also served as a consultant to a major drug rehabilitation program. It didn't take me long to realize that alcoholics and addicts were more likely to recover in self-help groups than in classical psychiatric settings.

Psychotherapy, medications, and expensive hospitals and clinics can sober up a drunk but seldom succeed in helping him remain sober. Most addicts quickly relapse. They have a much better chance to recover if they become active in Alcoholics Anonymous (AA) and similar self-help groups.

Once I realized that AA members were more likely to stay sober and rebuild their lives, I became a big fan of Alcoholics Anonymous. I began sending patients with drinking problems to AA and related groups, such as ACOA (Adult Children of Alcoholics). If an alcoholic came to me for treatment, I insisted that he also go to AA because otherwise he'd be wasting both our time and his money.

One night I stopped by a friend's office on the way to a party. We had two hours before it began, and my friend, who was a recovering alcoholic, said: “Do you want to take in a movie or go to an AA meeting?” I had sent many patients to AA but had never been to a meeting, since I have never had a drinking problem. I jumped at a chance to attend an AA meeting—it was a new experience.

The meeting was held at a local YMCA. A dozen men and a few women sat on folding chairs in a plain room. The meeting lasted an hour. I was amazed by what I heard—these people seemed to talk about my trading!

They talked about alcohol, but as long as I substituted the word “loss” for “alcohol,” most of what they said applied to me! My account equity was swinging up and down in those days. I left that meeting knowing that I had to handle my losses the way AA handles alcoholism.

8. Trading Lessons from AA

Almost any drunk can stay sober for a few days—until the urge to drink drives him back to the bottle. He cannot resist as long as he continues to think and feel like an alcoholic. Sobriety begins inside a person's mind.

Alcoholics Anonymous (AA) has a system for changing the way people think and feel about drinking. AA members use a 12-step program for changing their minds. These 12 steps, described in the book *Twelve Steps and Twelve Traditions*, refer to 12 stages of personal growth. Recovering alcoholics attend meetings where they share their experiences with other recovering alcoholics, supporting each other in their sobriety. Any member can get a sponsor—another AA member whom he can call for support when he feels the urge to drink.

AA was founded in the 1930s by two alcoholics—a doctor and a traveling salesman who began meeting to help each other stay sober. They developed a system that worked so well, others began to join them. AA has only one goal—to help its members stay sober. It doesn't ask for money, takes no political positions, and runs no promotional campaigns. AA keeps growing thanks only to word of mouth and owes its success only to its effectiveness.

The 12-step program of AA is so effective that people with other problems now use it. There are 12-step groups for children of alcoholics, gamblers, and others. I've become convinced that traders can stop losing money if they apply the key principles of Alcoholics Anonymous to their trading.

Denial

A social drinker enjoys a cocktail, a glass of wine, or a beer but stops when he feels he's had enough. An alcoholic's chemistry is different. Once an alcoholic takes a drink, he feels an urge to continue until he passes out or his money runs out.

A drunk may say that he needs to cut down on drinking, but can't admit that it's out of control. Try telling an alcoholic relative, friend, or employee that his drinking is out of control and damaging his life, and you'll run into a wall of denial.

An alcoholic may say: “My boss fired me ‘cause I was hung over and came in late. My wife took the kids and left ‘cause she had no sense to begin with.

My landlord is trying to kick me out of the apartment ‘cause I’m a little behind on the rent. I'm gonna have to cut down on my drinking, and everything will be all right.”

This man has lost his family and his job. He is about to lose the roof over his head. His life is spinning out of control—but he keeps saying that he can cut down on his drinking. This is denial!

Alcoholics deny their problems while their lives are falling apart. As long as an alcoholic believes that he can “control his drinking,” he is headed downhill. Nothing will ever change, even if he gets a new job, a new wife, and a new landlord.

Alcoholics deny that alcohol controls their lives. When they talk of reducing drinking, they talk about managing the unmanageable. They are like a driver whose car spins out of control on a mountain road. When the car careens down a cliff, it is too late to promise to drive carefully. An alcoholic's life careens out of control, while he denies he's an alcoholic.

There is a stark parallel between an alcoholic and a trader whose account is being demolished by losses. As he keeps changing his trading tactics, he acts like an alcoholic who tries to solve his problem by switching from hard liquor to beer. A loser denies that he's lost control over his trading life.

Rock Bottom

A drunk can begin his journey to recovery only after he admits that he is an alcoholic. He must see that alcohol controls his life and not the other way around. Most drunks cannot accept this painful truth. They can face it only after they hit rock bottom.

Some alcoholics hit rock bottom when they develop a life-threatening illness. Others hit it after being rejected by their family or losing a job. An alcoholic needs to sink to a point so low, so deep down in the gutter, so unbearably painful that it finally penetrates his denial.

The pain of hitting rock bottom makes an alcoholic see how deep he has sunk. He sees a simple stark choice—either turn his life around or die. Only then is an alcoholic ready to begin his journey to recovery.

Profits give traders an emotional high and a feeling of power. They try to get high again, put on reckless trades, and give back their profits. Most traders cannot stand the pain of severe losses. They die as traders after hitting rock

bottom and wash out of the markets. The few survivors realize that the main trouble is not with their methods—it is with their thinking. They can change and become successful traders.

The First Step

An alcoholic who wants to recover has to go through twelve steps—twelve stages of personal growth. He needs to change how he thinks and feels, how he relates to himself and others.

The first step of AA is the hardest: to admit that one is powerless over alcohol. An alcoholic must recognize that his life has become unmanageable, that alcohol is stronger than he is. Most cannot take that step, drop out, and go on to destroy their lives.

If alcohol is stronger than you, then you can never touch it again, not even a sip, for as long as you live. You have to give up drinking forever. Most drunks do not want to give up that pleasure. They destroy their lives rather than take the first step of AA. Only the pain of hitting rock bottom can motivate them to take that first step.

One Day at a Time

You may have seen bumper stickers that say, “One day at a time” or “Easy does it.” Those are AA slogans, and people who drive those cars are probably recovering alcoholics.

Planning for life without alcohol can seem overwhelming. That's why AA encourages its members to live sober one day at a time.

The goal of every AA member is to stay sober today and go to bed sober tonight. Gradually, days become weeks, then months, then years. AA meetings and other activities help each recovering alcoholic stay sober, one day at a time.

Recovering alcoholics receive—and give others—invaluable support and fellowship at these meetings. They are held at all hours, all over the world. Traders have much to learn from those meetings.

An AA Meeting

One of the best things that a trader can do is go to an AA meeting. I especially recommend it to any trader on a losing streak. Call Alcoholics

Anonymous and ask about the next “open meeting” or “beginners' meeting” in your area.

A meeting lasts about an hour. You can sit in the back of the room and listen carefully. There is no pressure to speak, and nobody asks for your last name.

Each meeting begins with a long-term member getting up and speaking about his or her personal struggle for recovery from alcoholism. Several other members share their experiences. There is a collection to cover expenses—give a dollar if you like. All you have to do is listen carefully, and every time you hear the word “alcohol,” substitute the word “loss” for it. You will feel as if the people in the meeting are talking about your trading!

9. Losers Anonymous

A social drinker enjoys an occasional drink, but an alcoholic craves alcohol. He denies that alcohol controls and destroys his life—until he reaches a personal crisis. It may be a life-threatening illness, unemployment, abandonment by the family, or another unbearably painful event. AA calls it “hitting rock bottom.”

The pain of hitting rock bottom punctures an alcoholic's denial. He sees a stark choice—to drown or to come up for air. His first step to recovery is to admit that he is powerless over alcohol. A recovering alcoholic can never drink again.

Loss is to a loser what alcohol is to an alcoholic. A small loss is like a single drink. A big loss is like a bender. A series of losses is like an alcoholic binge. A loser keeps switching between different markets, gurus, and trading systems. His equity shrinks while he is trying to recreate the pleasurable sensation of winning.

Losing traders think and act like alcoholics, except that their speech is not slurred. The two groups are so similar that you can predict what a loser will do by using alcoholics as a model.

Alcoholism is a curable disease—and so is losing. Losers can change by using the principles of Alcoholics Anonymous.

The Urge to Trade

Successful traders treat drawdowns the way social drinkers treat alcohol. They have a little and stop. If they take several losses in a row, they take that as a signal that something isn't working: perhaps their system isn't in gear with the current market environment. It's time for a break and a fresh look at the markets. Losers, on the other hand, cannot stop—they keep trading because they are addicted to the excitement of the game and keep hoping for a big win.

A prominent trading advisor who has since busted out wrote that to him the pleasure of trading was higher than that of sex or flying jet aircraft. Just as alcoholics proceed from social drinking to drunkenness, losers take bigger and bigger risks. They cross the hugely important line: the one between

taking a business risk and gambling. Many losers don't even know that line exists.

Losers feel the urge to trade, just as alcoholics feel the urge to drink. They make impulsive trades, go on trading binges, and try to trade their way out of a hole.

Losers bleed money from their accounts. Most of them bust out, but some turn to managing other people's money after losing their own; still others sell advisory services, like burned-out drunks who wash glasses in a bar.

Most losers hide their losses from themselves and from everyone else. They keep no records and throw away brokerage statements. A loser is like an alcoholic who doesn't want to know how many ounces of liquor he drank.

Into the Hole

A loser trades in a fog and doesn't know why he keeps losing. If he knew, he would have done something about it and become a winner. A loser tries to manage his trading the way an alcoholic tries to manage his drinking.

Losers' desperate hopes for magic solutions help advisors sell their services to the public. They switch to new trading systems, buy more software, and look for tips from new gurus.

As losses mount and equity shrinks, a loser grows desperate and converts outright positions into spreads, doubles up on losing positions, reverses and trades in the opposite direction, and so on. All of that does him no more good than switching from hard liquor to wine can help an alcoholic.

A losing trader careens out of control, trying to manage the unmanageable. Alcoholics die prematurely, and most traders bust out of the markets and never come back. New trading methods, hot tips, and improved software will not help a person who cannot handle himself.

A loser keeps getting high from trading while his equity shrinks. Trying to tell him that he is a loser is like trying to take a bottle away from a drunk. A loser has to hit rock bottom before he can begin to recover. You have to change how you think in order to stop losing and begin your recovery as a trader.

Trader's Rock Bottom

Hitting rock bottom feels horrible. It is painful and humiliating. You hit it when you lose money you cannot afford to lose. You hit it when you gamble away your savings. You hit it after you tell your friends how smart you are and later have to ask them for a loan. You hit rock bottom when the market comes roaring at you and yells: “You fool!”

Some people hit rock bottom after only a few weeks of trading. Others keep adding money to their accounts to postpone the day of reckoning. It hurts to see a loser in the mirror. We spend our lifetime building up self-esteem. Most of us have a high opinion of ourselves. Your first impulse may be to hide, but remember, you are not alone. Almost every trader has been there.

Many traders who hit rock bottom slink away from the market and never look back. Many who trade today will be gone in a year, if not sooner. They'll hit rock bottom, crumble, and leave. They'll try to forget trading like a bad dream.

Some will lick their wounds and wait until the pain fades away and then return, having learned little. They'll be fearful, and their fear will further impair their trading.

Fortunately, some traders will recoil from rock bottom to begin the process of change and growth. For these individuals, the pain of hitting rock bottom will break the vicious cycle of getting high from winning and then losing everything and crashing. *When you admit that your personal problem causes you to lose, you can begin building a new trading life. You can start developing the discipline of a winner*.

Trader's First Step

Just as an alcoholic needs to admit that he can't control his drinking, a trader needs to admit that he cannot control his losses. The first step of an AA member is to say: “I am an alcoholic, I am powerless over alcohol.” As a trader, you have to take your first step and say: “I am a loser, I am powerless over losses.”

Recovering alcoholics struggle to stay sober, one day at a time. A trader can recover, using the principles of AA. Now you have to struggle to trade without losses, one day at a time.

You may say that's impossible. What if you buy, and the market immediately declines? What if you sell short, and it turns out to be the bottom tick, and

the market immediately rallies? Even the best traders lose money on some trades.

The answer is to draw a line between a businessman's risk and a loss. As traders, we always take businessman's risks, but we may never take a loss greater than this predetermined risk.

For example, a storekeeper takes a risk every time he stocks new merchandise. If it doesn't sell, he'll lose money. An intelligent businessman takes only risks that will not put him out of business, even if he makes several mistakes in a row. Stocking two crates of merchandise may be a sensible business risk, but stocking a full trailer is probably a gamble.

As a trader, you are in the business of trading. You need to define your businessman's risk—the maximum amount of money you'll risk on any single trade. There is no standard dollar amount, just as there is no standard business. An acceptable businessman's risk depends, first of all, on the size of your trading account. It also depends on your trading method and pain tolerance.

The concept of a businessman's risk will change the way you manage your money (see Section 9, “Risk Management”). The absolute maximum a trader may risk on any trade is two percent of his account equity. For example, if you have $30,000 in your account, you may not risk more than $600 per trade, and if you have $10,000, you may not risk more than $200. If your account is small, limit yourself to trading fewer shares, less expensive futures, or mini-contracts. If you see an attractive trade, but a logical stop would have to be placed where more than 2 percent of equity would be at risk—pass on that trade. You may risk less, but you may never risk more. You must avoid risking more than 2 percent on a trade the way a recovering alcoholic avoids bars.

A trader who blames high commissions on a broker and slippage on a floor trader gives up control of his trading life. Try to reduce both, but take responsibility for them. If you lose even a dollar more than your businessman's risk, including commissions and slippage, you are a loser.

Do you keep good trading records? Poor record-keeping is a sure sign of a gambler. Good businessmen keep good records. Your trading records must show the date and price of every entry and exit, slippage, commissions, stops, all adjustments of stops, reasons for entering, objectives for exiting,

maximum paper profit, maximum paper loss after a stop was hit, and any other data necessary to review and fully understand your trade later in the future.

If you bail out of a trade within your businessman's risk, it is normal business. There is no bargaining, no waiting for another tick, no hoping for a change. Losing a dollar more than your established businessman's risk is like getting drunk, getting into a brawl, getting sick to your stomach on your way home, and waking up in a gutter. You would never want that to happen.

A Meeting for One

When you go to an AA meeting, you'll see people who have not had a drink in years stand up and say: “Hello, my name is so-and-so, and I am an alcoholic.” Why do they call themselves alcoholics after years of sobriety? Because if they think they have beaten alcoholism, they will start drinking again. If a person stops thinking he is an alcoholic, he is free to take a drink, then another, and will probably end up in the gutter again. A person who wants to stay sober must remember that he is an alcoholic for the rest of his life.

Traders would benefit from our own self-help organization—I'd call it Losers Anonymous. Why not Traders Anonymous? Because a harsh name helps focus attention on our self-destructive tendencies. After all, Alcoholics Anonymous doesn't call itself Drinkers Anonymous. As long as you call yourself a loser, you'll focus on avoiding losses.

Several traders have argued against what they thought was the “negative thinking” of Losers Anonymous. A retired woman from Texas, a highly successful trader, described her approach. She is very religious, prays every morning, and then drives to an office where she actively trades. Whenever the market starts moving against her, she cuts her losses very fast because it would not please the Lord for her to lose His money. I thought that our methods were similar. The goal is to cut losses due to some objective, external rule.

Trading within a businessman's risk is like living without alcohol. A trader has to admit that he is a loser, just as a drunk has to admit that he is an alcoholic. Then he can begin his journey to recovery.

This is why every morning before trading I suggest saying: “Good morning, my name is so-and-so, and I am a loser. I have it in me to do serious financial damage to my account.” This is like an AA meeting—it keeps your mind focused on the first principles. Even if you take thousands of dollars out of the market today, tomorrow you say: “Good morning, my name is so-and-so and I am a loser.”

A friend of mine joked: “When I sit in front of my quote screen in the morning, I say, ‘My name is John, and I’m gonna rip your throat out.'” His thinking generates tension. “Losers Anonymous” thinking generates serenity. A trader who feels serene and relaxed can focus on looking for the best and safest trades. When a sober man and a drunk enter a race, you know who is more likely to win. A drunk may win once in a while, but the sober man is the one to bet on. You want to be the sober man in that race.

10. Winners and Losers

We come to trading from different walks of life and bring along our mental baggage. Many of us find that when we act in the market the way we do in our everyday life, we lose money. Most of all, your success or failure depends on your ability to use intellect rather than act emotionally. A trader who feels overjoyed when he wins and de-pressed when he loses is at the mercy of market moves and cannot accumulate equity.

To be a winner in the market you must act coolly and responsibly. The pain of losing drives people to look for magic methods. At the same time, they discard much of what is useful in their professional or business backgrounds.

Like an Ocean

The market is like an ocean—it moves up and down regardless of what you wish. You may feel joy when you buy a stock and it explodes in a rally. You may feel drenched with fear when you go short but the market rises, melting your equity with every uptick. Those feelings have nothing to do with the market—they exist only inside of you.

The market doesn't know you exist. You can do nothing to influence it. The ocean doesn't care about your welfare, but it has no wish to hurt you either. You can only control your behavior.

A sailor cannot control the ocean, but he can control himself. He can study currents and weather patterns, learn good sailing techniques, and gain experience. He can learn when to sail and when to stay in the harbor. A successful sailor uses his intelligence.

An ocean can be useful—you can fish in it and use its surface to get to other islands. An ocean can be dangerous—you can drown in it. The more rational your approach, the more likely you are to get what you want. On the other hand, when you act out your emotions, you cannot focus on the reality of the ocean.

A trader has to study trends and reversals in the market the way a sailor studies the ocean. He must trade on a small scale while learning to handle his account. You can never control the market, but you can learn to control yourself.

After a string of profitable trades, a beginner may feel he can walk on water. He starts taking wild risks and blows up his account. On the other hand, an amateur who takes several losses in a row often feels so demoralized that he cannot place an order even when his system gives him a signal to buy or sell. If trading makes you feel elated or frightened, you cannot fully use your intellect. When joy sweeps you off your feet, you will make irrational trades and lose. When fear grips you, you'll miss profitable trades.

A sailor whose boat is being battered by ocean winds battens his sails—reduces sail area. The first remedy for a trader battered by the market is to reduce the size of his trades. Trade small while you're learning or when feeling stressed.

A professional trader uses his head and stays calm. Only amateurs become excited or depressed. Emotional trading is a luxury that nobody can afford.

Emotional Trading

Most people crave excitement and entertainment. Singers, actors, and professional athletes command much higher incomes than such mundane workmen as physicians, pilots, or college professors. People love to have their nerves tickled—they buy lottery tickets, fly to Las Vegas, and slow down to gawk at road accidents.

Emotional trading can be very addictive. Even those who drop money in the markets receive a fantastic entertainment value.

The market is a spectator sport and a participant sport rolled into one. Imagine going to a major-league ball game in which you are not confined to the bleachers. Pay a few hundred dollars and be allowed to run onto the field and join the game. If you hit the ball right, you'll get paid like a professional.

You would probably think twice before running onto the field the first few times. This cautious attitude is responsible for the well-known “beginner's luck.” Once a beginner hits the ball right a few times and collects his pay, he is likely to get the idea that he is as good as the pros or even better and could make a good living from the game. Greedy amateurs start running onto the field too often, even when there are no good playing opportunities. Before they know what hit them, a short string of losses destroys their accounts.

The market is among the most entertaining places on the face of the Earth, but emotional decisions are lethal. If you ever go to a racetrack, turn around,

and watch the humans instead of horses. Gamblers stomp their feet, jump up and down, and yell at horses and jockeys. Thousands of people act out their emotions. Winners embrace, and losers tear up their tickets in disgust. The joy, the pain, and the intensity of wishful thinking are caricatures of what happens in the markets. A cool handicapper who makes his living at the track does not get excited, yell, or bet the bulk of his roll on a single race, or even in a single day.[1]

Casinos love drunks. They pour gamblers free drinks to make them more emotional and gamble more. Casinos also throw out calm and intelligent card-counters. There is less free liquor on Wall Street than in a casino, but at least here, they do not throw you out for being a good trader.

In Charge of Your Life

When a monkey hurts its foot on a tree stump, he flies into a rage and kicks the piece of wood. You laugh at a monkey, but do you laugh at yourself when you act like him? If the market drops while you are long, you may double up on your losing trade or else flip and go short, trying to get even. This is acting emotionally instead of using your intellect. What's the difference between a trader trying to get back at the market and a monkey kicking a tree stump? Acting out of anger, fear, or elation destroys the chance of success. You have to analyze your behavior instead of acting out your feelings.

We get angry at the market; we become afraid of it and develop silly superstitions. All the while, the market keeps cycling through its rallies and declines like an ocean going through its storms and calm periods. Mark Douglas writes in *The Disciplined Trader* that in the market, “There is no beginning, middle, or end—only what you create in your own mind. Rarely do any of us grow up learning to operate in an arena that allows for complete freedom of creative expression, with no external structure to restrict it in any way.”

We try to cajole or manipulate the market, acting like the ancient emperor Xerxes, who ordered his soldiers to horsewhip the sea for sinking his fleet. Most of us aren't aware of how manipulative we are, how we bargain and act out our feelings. Most of us consider ourselves the center of the universe and expect every person or group to be either good or bad to us. This does not work in the market, which is completely impersonal.

Leston Havens, a Harvard University psychiatrist, wrote: “Cannibalism and slavery are probably the oldest manifestations of human predation and submission. Although both are now discouraged, their continued existence in psychological forms demonstrates that civilization has achieved great success in moving from the concrete and physical to the abstract and psychological, while persisting in the same purposes.” Parents threaten their children, bullies hit them, and teachers try to bend their will in school. Little wonder that most of us grow up either hiding in a shell or learning how to manipulate others in self-defense. Acting independently doesn't feel natural to us—but that is the only way to succeed in the market.

Douglas warns, “If the market's behavior seems mysterious to you, it's because your own behavior is mysterious and unmanageable. You can't really determine what the market is likely to do next when you don't even know what you'll do next.” Ultimately, “the one thing you can control is yourself. As a trader, you have the power either to give yourself money or to give your money to other traders.” He adds, “The traders who can make money consistently…approach trading from the perspective of a mental discipline.”

All of us have our own demons to exorcise on the journey to becoming successful traders. Here are several rules that worked for me as I grew from a wild amateur into an erratic semiprofessional and finally into a calm professional trader. You may change this list to suit your personality.

1. Decide that you are in the market for the long haul—that is, you want to be a trader even 20 years from now.
2. Learn as much as you can. Read and listen to experts, but keep a degree of healthy skepticism about everything. Ask questions, and do not accept experts at their word.
3. Do not get greedy and rush to trade—take your time to learn. The markets will be there, offering more good opportunities in the months and years ahead.
4. Develop a method for analyzing the market—that is, “If A happens, then B is likely to happen.” Markets have many dimensions—use several analytic methods to confirm trades. Test everything on historical data and then in the markets, using real money. Markets keep changing —you need different tools for trading bull and bear markets and

transitional periods as well as a method for telling the difference (see the sections on technical analysis).

5. Develop a money management plan. Your first goal must be long-term survival; your second goal, a steady growth of capital; and your third goal, making high profits. Most traders put the third goal first and are unaware that goals 1 and 2 exist (see Section 9, “Risk Management”).
6. Be aware that a trader is the weakest link in any trading system. Go to a meeting of Alcoholics Anonymous to learn how to avoid losses or develop your own method for cutting out impulsive trades.
7. Winners think, feel, and act differently than losers. You must look within yourself, strip away your illusions, and change your old ways of being, thinking, and acting. Change is hard, but if you want to be a professional trader, you have to work on changing and developing your personality.

In order to succeed, you need drive, knowledge, and discipline. Money is important, but less so than any of those qualities. If you have enough drive to work through this book, you'll acquire much knowledge, and then we'll close the circle by returning to the topic of discipline in the final chapters.

Notes

1. I carry in my wallet a free lifetime pass to New York's Belmont racetrack that belonged to my late great friend Lou Taylor. It looks like an employee card, but on the “position” line it says—winner. He won many handicapping championships and continued to take money from the racetrack until a few months before he died.

PART 2

Mass Psychology

Wall Street is named after a wall that kept farm animals from wandering away from the settlement at the southern tip of Manhattan. The farming legacy lives on in the language of traders. Four animals are mentioned especially often on Wall Street: bulls and bears, hogs and sheep. Traders say: “Bulls make money, bears make money, but hogs get slaughtered.”

A bull fights by striking up with his horns. A bull is a buyer—a person who bets on a rally and profits from a rise in prices. A bear fights by striking down with his paws. A bear is a seller—a person who bets on a decline and profits from a fall in prices.[1]

Hogs are greedy. Some of them buy or sell positions that are too large for their accounts and get slaughtered by a small adverse move. Other hogs overstay their positions—they keep waiting for profits even after the trend reverses. Sheep are passive and fearful followers of trends, tips, and gurus. They sometimes put on a bull's horns or a bearskin and try to swagger. You can recognize them by their pitiful bleating when the market becomes volatile.

Whenever the market is open, bulls are buying, bears are selling, hogs and sheep get trampled underfoot, and the undecided traders wait on the sidelines. Quote screens around the world show a steady stream of the latest prices for any trading vehicle. Thousands of eyes are focused on each price as people make trading decisions.

11. What Is Price?

Traders can be divided into three groups: buyers, sellers, and undecided. Buyers want to pay as little as possible, and sellers want to charge as much as possible. Their permanent conflict is reflected in bid-ask spreads, discussed in the Introduction. “Ask” is what a seller asks for his merchandise. “Bid” is what a buyer offers for that merchandise.

A buyer has a choice: to wait until prices come down or pay what the sellers demand. A seller has a similar choice: wait until prices rise or accept a lower offer for his merchandise.

A trade occurs when there is a momentary meeting of two minds: an eager bull agrees to a seller's terms and pays up, or an eager bear agrees to a buyer's terms and sells a little cheaper.

The presence of undecided traders puts pressure on bulls and bears. Buyers and sellers move fast because they know that they're surrounded by a crowd of undecided traders who may step in and snatch away their deal at any moment.

The buyer knows that if he thinks too long, another trader can step in and buy ahead of him. A seller knows that if he tries to hold out for a higher price, another trader may step in and sell at a lower price. The crowd of undecided traders makes buyers and sellers more willing to deal with their opponents. A trade occurs when there is a meeting of two minds.

A Consensus of Value

Each tick on your quote screen represents a deal between a buyer and a seller.

Buyers are buying because they expect prices to rise. Sellers are selling because they expect prices to fall. Buyers and sellers are surrounded by crowds of undecided traders who put pressure on them because they may become buyers or sellers themselves.

Buying by bulls pushes markets up, selling by bears pushes them down, and undecided traders make everything happen faster by creating a sense of urgency among buyers and sellers.

Traders come to the markets from all over the world: in person, via computers, or through their brokers. Everybody has a chance to buy and to sell. *Each price is a momentary consensus of value of all market participants, expressed in action*. Prices are created by masses of traders—buyers, sellers, and undecided people. The patterns of prices and volume reflect mass psychology of the markets.

Behavior Patterns

Huge crowds trade on stock, commodity, and option exchanges. Big money and little money, smart money and dumb money, institutional money and private money, long-term investors and short-term traders, all meet at the exchange. *Each price represents a momentary consensus of value between buyers, sellers, and undecided traders at the moment of transaction. There is a crowd of traders behind every pattern on the screen*.

Crowd consensus changes from moment to moment. Sometimes it gets established in a very low-key environment, and at other times the environment turns wild. Prices move in small increments during quiet times. When a crowd becomes either spooked or elated, prices begin to jump. Imagine bidding for a life preserver aboard a sinking ship—that's how prices leap when masses of traders become emotional about a trend. An astute trader aims to enter the market during quiet times and take profits during wild times. That, of course, is the total opposite of how amateurs act: they jump in or out when prices begin to run, but grow bored and not interested when prices are sleepy.

Chart patterns reflect swings of mass psychology in the financial markets. Each trading session is a battle between bulls, who make money when prices rise, and bears, who profit when they fall. The goal of a serious technical analyst is to discover the balance of power between bulls and bears and bet on the winning group. If bulls are much stronger, you should buy and hold. If bears are much stronger, you should sell and sell short. If both camps are about equal in strength, a wise trader stands aside. He lets bulls and bears fight with each other, and enters a trade only when he is reasonably sure which side is likely to win.

Prices and volume, along with the indicators that track them, reflect crowd behavior. Technical analysis is similar to poll taking. Both combine science and art: They are partly scientific because we use statistical methods and

computers; they are partly artistic because we use personal judgment and experience to interpret our findings.

12. What Is the Market?

What's the reality behind market quotes, numbers, and graphs? When you check prices in your newspaper, follow ticks on your screen, or plot an indicator on a chart, what exactly are you looking at? What *is* this market that you want to analyze and trade?

Amateurs act as if the market is a giant happening, a ball game in which they can join the professionals and make money. Traders from a scientific or engineering background often treat the market as a physical event and apply the principles of signal processing, noise reduction, etc. By contrast, all professional traders know full well that the market is a huge mass of people.

Every trader tries to take money from others by outguessing them on the probable direction of the market. The members of the market crowd live on different continents, but are brought together by modern telecommunications in the pursuit of profit at each other's expense. *The market is a huge crowd of people. Each member of the crowd tries to take money from others by outsmarting them*. The market is a uniquely harsh environment because everyone is against you, and you are against everyone.

Not only is the market harsh, you have to pay whenever you enter and exit. You have to jump over the barriers of commissions and slippage before you can collect a dime. The moment you place an order, you owe your broker a commission—you're behind the game the moment you enter. Market makers try to hit you with slippage when your order arrives for execution. They try to take another bite out of your account when you exit. *In trading, you compete against some of the brightest minds in the world, while fending off the piranhas of commissions and slippage*.

Worldwide Crowds

In the old days, markets were small, and many participants knew one another. The New York Stock Exchange was formed in 1792 as a club of two dozen brokers. On sunny days, they used to gather under a cottonwood tree, and on rainy days, they moved to Fraunces Tavern. As soon as those brokers organized the New York Stock Exchange, they stuck the public with fixed commissions, which lasted for the next 180 years.

These days, the few remaining floor traders are on the way out. Most of us are linked to the market electronically. Still, as we watch the same quotes on our screens and read the same articles in the financial media, we become members of the market crowd—even if we live thousands of miles away from one another. Thanks to modern telecommunications, the world is becoming smaller, while the markets are growing. The euphoria of London flows to New York, and the gloom of Tokyo infects Frankfurt.

When you analyze the market, you are looking at crowd behavior. Crowds behave alike in different cultures on different continents. Social psychologists have uncovered several laws that govern crowd behavior, and a trader needs to understand them in order to see how the market crowd influences him.

Groups, Not Individuals

Most people feel a strong urge to join the crowd and "act like everybody else." This primitive urge clouds your judgment when you put on a trade. A successful trader must think independently. He needs to be strong enough to analyze the market alone and carry out his trading decisions.

Crowds are powerful enough to create trends. The crowd may not be too bright, but it is stronger than any of us. Never buck a trend. If a trend is up, you should only buy or stand aside. Never sell short just because "the prices are too high"—never argue with the crowd. You do not have to run with the crowd—but you shouldn't run against it.

Respect the strength of the crowd—but don't fear it. Crowds are powerful, but primitive, their behavior simple and repetitive. A trader who thinks for himself can take money from crowd members.

The Source of Money

Do you ever stop to wonder where your expected profits will come from? Is there money in the markets because of higher company earnings, or lower interest rates, or a good soybean crop? *The only reason there is money in the markets is that other traders put it there. The money you want to make belongs to other people who have no intention of giving it to you*.

Trading means trying to take money from other people, while they are trying to take yours—that's why it is such a hard business. Winning is especially

difficult because brokers and floor traders take money from winners and losers alike.

Tim Slater compared trading to a medieval battle. A man used to go on a battlefield with his sword and try to kill his opponent, who was trying to kill him. The winner took the loser's weapons, his chattels, and his wife, and sold his children into slavery. Now we go to the exchanges instead of an open field. When you take money away from a man, it is not that different from drawing his blood. He may lose his house, his chattels, and his wife, and his children will suffer.

An optimistic friend of mine once snickered that there are plenty of poorly prepared people on the battlefield: “Ninety to ninety-five percent of the brokers don't know the first thing about research. They don't know what they're doing. We have the knowledge, and some poor people who do not have it are just giving their money away to charity.” This theory sounds good, but he soon found out that it was wrong—there is no easy money in the market.

Sure enough, there are plenty of dumb sheep waiting to be fleeced or slaughtered. The sheep are easy—but if you want a piece of their meat, you've got to fight some very dangerous competitors. There are mean professionals: American gunslingers, English knights, German landsknechts, Japanese samurai, and other warriors, all going after the same hapless sheep. Trading means battling crowds of hostile people, while paying for the privilege of entering the battle and leaving it, whether alive, wounded, or dead.

Inside Information

There is at least one group of people who get information before us. Records show that corporate insiders as a group consistently make profits in the stock market. And those are legitimate trades, reported by insiders to the Securities and Exchange Commission. They represent the tip of the iceberg—but there is a great deal of illegitimate insider trading.

People who trade on inside information are stealing our money. The insider trials have landed some of the more notorious insiders in prison. Convictions for insider trading continue at a steady pace, especially after bull markets collapse. After the 2008 debacle, a group of executives from the Galleon fund, led by its CEO, have been sentenced to lengthy jail terms, while a

former board member of several leading U.S. corporations got two years behind bars, and recently a money manager from SAC Capital was convicted.

People convicted during the insider trials were caught because they became greedy and careless. The tip of the iceberg has been shaved down, but its bulk continues to float, ready to hit any account that comes in contact with it.

Trying to reduce insider trading is like trying to get rid of rats on a farm. Pesticides keep them under control, but do not root them out. A retired chief executive of a publicly traded firm explained to me that a smart man does not trade on inside information but gives it to his golfing buddies at a country club. Later they give him inside information on their companies, and both profit without being detected. The insider network is safe as long as its members follow the same code of conduct and don't get too greedy. Insider trading is legal in the futures markets, and until recently it was legal for congressmen, senators, and their staff.

Charts reflect all trades by all market participants—including insiders. They leave their footprints on the charts just like everyone else—and it is our job as technical analysts to follow them to the bank. Technical analysis can help you detect insider buying and selling.

13. The Trading Scene

Humans have traded since the dawn of history—it was safer to trade with your neighbors than raid them. As society developed, money became the medium of exchange. Stock and commodity markets are among the hallmarks of an advanced society. One of the key economic developments in Eastern Europe following the collapse of communism was the establishment of stock and commodity exchanges.

Today, stock, futures, and options markets span the globe. It took Marco Polo, a medieval Italian merchant, 15 years to get from Italy to China and back. Now, when a European trader wants to buy gold in Hong Kong, he can get his order filled in seconds. There are hundreds of stock and futures exchanges around the world. All exchanges must meet three criteria, first developed in the agoras of ancient Greece and the medieval fairs of Western Europe: an established location, rules for grading merchandise, and defined contract terms.

Individual Traders

Private traders usually come to the market after a successful career in business or in the professions. An average private futures trader in the United States is a 50-year-old, married, college-educated man. The two largest occupational groups among futures traders are farmers and engineers.

Most people trade for partly rational and partly irrational reasons. Rational reasons include the desire to earn a large return on capital. Irrational reasons include gambling and a search for excitement. Most traders are not aware of their irrational motives.

Learning to trade takes time, money, and work. Few individuals rise to the level of professionals who can support themselves by trading. Professionals are extremely serious about what they do. They satisfy their irrational goals outside the markets, while amateurs act them out in the marketplace.

The major economic role of a trader is to support his broker—to help him pay his mortgage bills and keep his children in private schools. In addition, the role of a speculator is to help companies raise capital in the stock market and to assume price risk in the commodities markets, allowing producers to

focus on production. These lofty economic goals are far from a speculator's mind when he places his orders to buy or sell.

Institutional Traders

Institutions are responsible for a huge volume of trading, and their deep pockets give them several advantages. They pay low institutional commissions. They can afford to hire the best researchers and traders. A friend of mine who headed a trading desk at a bank based some of his decisions on a service provided by a group of former CIA officers. He got some of his best ideas from their reports, while the substantial annual fee was small potatoes for his firm compared to its huge trading volume. Most private traders do not have such opportunities.

Some large firms have intelligence networks that enable them to act before the public. One day, when oil futures rallied in response to a fire on a platform in the North Sea, I called a friend at an oil firm. The market was frantic, but he was happy, having bought oil futures half an hour before they exploded. He got a telex from an agent in the area of the fire before the reports appeared on the newswire. Timely information is priceless, but only a large company can afford an intelligence network.

An acquaintance who traded successfully for a Wall Street investment bank felt lost when he quit to trade for himself. He discovered that a real-time quote system in his Park Avenue apartment didn't give him news as fast as the squawk box on the trading floor of his old firm. Brokers from around the country used to call him with the latest ideas because they wanted his orders. “When you trade from your house, you are never the first to hear the news,” he says.

The firms that deal in both futures and cash markets have two advantages. They have true inside information, and they are exempt from speculative position limits that exist in many futures markets. I went to visit an acquaintance at a multinational oil company; after passing through security barriers tighter than at an airport, I walked down a glass corridor that overlooked rooms where clusters of men huddled around monitors trading oil products. When I asked my host whether his traders were hedging or speculating, he looked me straight in the eye and said, “Yes.” I asked again and received the same answer. Companies crisscross the thin line between hedging and speculating, using inside information.

In addition to the informational advantage, employees of trading firms have a psychological one—they can be more relaxed because their own money isn't at risk. When young people tell me of their interest in trading, I tell them to get a job with a trading firm and learn on someone else's dime. Firms almost never hire traders past their mid-twenties.

How can an individual coming later to the game compete against institutions and win?

The Achilles heel of most institutions is that they *have* to trade, while an individual trader is free to trade or stay out of the market when he wants. Banks have to be active in the bond market and grain producers have to be active in the grain market at almost any price. An individual trader is free to wait for the best opportunities.

Most private traders fritter away this fantastic advantage by overtrading. An individual who wants to succeed against the giants must develop patience and eliminate greed. *Remember, your goal is to trade well, not to trade often*.

Successful institutional traders receive raises and bonuses. Even a high bonus can feel puny to someone who earns millions of dollars for his firm. Successful institutional traders often talk of quitting and going to trade for themselves. Very few of them manage to make this transition.

Most traders who leave institutions get caught up in the emotions of fear, greed, elation, and panic when they start risking their own money. They seldom do well trading for their own accounts—another sign that psychology is at the root of trading success or failure. Few institutional traders realize to what a large extent they owe their success to their trading managers, who control their risk levels. Going out on your own means becoming your own manager—we'll return to this in a later chapter, when we focus on how to organize your trading.

The Sword Makers

Just as medieval knights shopped for the sharpest swords, modern traders shop for the best trading tools. The growing access to good software and declining commission rates are creating a more level playing field. A computer allows you to speed up your research and follow more leads. It helps you analyze more markets in greater depth. We'll return to computers and software in Chapter 21, “Computers in Trading,” but here it is in brief.

There are three types of trading software: toolboxes, black boxes, and gray boxes. A **toolbox** allows you to display data, draw charts, plot indicators, change their parameters, and test your trading systems. Toolboxes for options traders include option valuation models. Adapting a good toolbox to your needs can be as easy as adjusting the seat of your car.

In 1977, I bought the first ever toolbox for computerized technical analysis. It cost $1,900 plus monthly data fees. Today, inexpensive, and even free, software places powerful tools at everyone's fingertips. I illustrated most of the concepts in this book using Stockcharts.com because I wanted my new book to be useful to as many traders as possible.

Stockcharts.com evens out the playing field for traders. It is clear, intuitive, and rich in features. Its basic version is free, although I used its inexpensive “members' version” for higher quality charting. I still remember how hard it was in the beginning and want to show you how much analytic power you can have for free or at a very minimal cost.

What goes on inside a **black box** is secret. You feed it data, and it tells you what and when to buy and sell. It is like magic—a way to make money without thinking. Black boxes are usually sold with excellent historical track records. This is only natural because they were created to fit old data. Markets keep changing, and black boxes keep blowing up, but new generations of losers keep buying them. If you're in the market for a black box, remember that there is a guy in Brooklyn who has a bridge for sale.

Gray boxes straddle the fence between toolboxes and black boxes. These packages are usually put out by prominent market personalities. They disclose the general logic of their system and allow you to adjust some of their parameters.

Advisors

Some newsletters provide useful ideas and point readers in the direction of trading opportunities. A few offer educational value. Most sell an illusion of being an insider. Newsletters are good entertainment. Your subscription rents you a pen pal who sends often amusing and interesting letters and never asks you to write back, except for a check at renewal time. Freedom of the press in the United States allows even a convicted felon to go online and start sending out a financial advisory letter. Quite a few of them do.

The “track records” of various newsletters are largely an exercise in futility because hardly anybody takes every trade suggested by a newsletter. Services that rate newsletters are for-profit affairs run by small businessmen whose well-being depends on the well-being of the advisory industry. Rating services may occasionally tut-tut an advisor, but they dedicate most of their energy to loud cheerleading.

I used to write an advisory newsletter decades ago: worked hard, delivered straight talk, and received good ratings. I saw from the inside a tremendous potential for fudging results. This is a well-kept secret of the advisory industry.

After looking at my letters, a prominent advisor told me that I should spend less time on research and more on marketing. The first principle of letter writing is: “If you have to make forecasts, make a lot of them.” Whenever a forecast turns out right, double the volume of promotional mail.

14. The Market Crowd and You

Markets are loosely organized crowds whose members bet that prices will rise or fall. Since each price represents crowd consensus at the moment of transaction, traders are betting on the future opinion and mood of the crowd. The crowd keeps swinging from hope to fear and from indifference to optimism or pessimism. Most people don't follow their own trading plans because they get swept up in the crowd's feelings and actions.

As bulls and bears battle in the market, the value of your open positions soars or sinks, depending on the actions of total strangers. You can't control the markets. You can only set your position size and decide whether and when to enter or exit your trades.

Most traders feel jittery entering a trade. Their judgment becomes clouded after they join the crowd. Caught up in crowd emotions, many traders deviate from their plans and lose money.

Experts on Crowds

Charles Mackay, a Scottish barrister, wrote his classic book, *Extraordinary Popular Delusions and the Madness of Crowds*, in 1841. He described several mass manias, including the Tulip Mania in Holland in 1634 and the South Seas investment bubble in England in 1720.

The tulip craze began as a bull market in tulip bulbs. The long bull market convinced the prosperous Dutch that tulips would continue to appreciate. Many abandoned their businesses to grow tulips, trade them, or become tulip brokers. Banks accepted tulips as collateral and speculators profited. Finally, that mania collapsed in waves of panic selling, leaving people destitute and the nation shocked. Mackay sighed, “Men go mad in crowds, and they come back to their senses slowly and one by one.”

In 1897, Gustave LeBon, a French philosopher and politician, wrote *The Crowd*. A trader who reads it today can see his reflection in a century-old mirror.

LeBon wrote that when people gather in a crowd, “Whoever be the individuals that compose it, however like or unlike be their mode of life, their occupations, their character, or their intelligence, the fact that they have been transformed into a crowd puts them in possession of a sort of collective

mind which makes them feel, think, and act in a manner quite different from that in which each individual of them would feel, think, and act were he in a state of isolation."

People change when they join crowds. They become more credulous and impulsive, anxiously search for a leader, and react to emotions instead of using their intellect. An individual who becomes involved in a group becomes less capable of thinking for himself.

Group members may catch a few trends, but they get killed when trends reverse. Successful traders are independent thinkers.

Why Join?

People have been joining crowds for safety since the dawn of time. If a Stone Age hunter encountered a saber-toothed tiger, he had a very slim chance of coming out alive, but if hunters went as a group, most were likely to survive. Loners got killed and left fewer offspring. Since group members were more likely to survive, the tendency to join groups appears to have been bred into our genes.

Our society glorifies free will, but we carry many primitive impulses beneath the thin veneer of civilization. We want to join groups for safety and be led by strong leaders. The greater the uncertainty, the stronger our wish to join and to follow.

No saber-toothed tigers roam the canyons of Wall Street, but your financial survival is at risk. The value of your position rises and falls because of buying and selling by total strangers. Your fear swells up because you can't control prices. This uncertainty makes most traders look for a leader who will tell them what to do.

You may have rationally decided to go long or short, but the moment you put on a trade, the crowd starts sucking you in. You start losing your independence when you watch prices like a hawk and become elated when they go your way or depressed if they go against you. You are in trouble when you impulsively add to losing positions or reverse them. You lose your independence when you start trusting gurus more than yourself and don't follow your own trading plan. When you notice this happening, try to come back to your senses. If you can't regain your composure, exit your trades and go flat.

Crowd Mentality

When people join crowds, their thinking becomes primitive and they become more prone to act on impulse. Crowds swing from fear to glee, from panic to euphoria. A scientist can be cool and rational in his lab but make harebrained trades after being swept up in the mass hysteria of the market. A group can suck you in, whether you trade from a crowded brokerage office or a remote mountaintop. When you let others influence your trading decisions, your chance of success goes up in smoke.

Group loyalty was essential for a prehistoric hunter's survival. Joining a union can help even an incompetent performer keep his job. The market is different: joining a group tends to hurt you.

Many traders are puzzled why markets reverse immediately after they dump their losing position. This happens because crowd members are gripped by the same fear—and everybody dumps at the same time. Once the selling fit has ended, the market has nowhere to go but up. Optimism returns to the marketplace, and the crowd forgets fear, grows greedy, and goes on a new buying binge.

The crowd is bigger and stronger than you. No matter how smart you are, you cannot argue with the crowd. You have only one choice—to join the crowd or to act independently.

Crowds are primitive, and your trading strategies should be simple. You don't have to be a rocket scientist to design a winning trading method. If the trade goes against you—cut your losses and run. Never argue with the crowd —simply use your judgment to decide when to join and when to leave.

Your human nature leads you to give up your independence under stress. When you put on a trade, you feel the desire to imitate others, overlooking objective signals. This is why you need to write down and follow your trading system and money management rules. They represent your rational individual decisions, made before you entered a trade.

Who Leads?

An inexperienced trader may feel intense joy when prices move in his favor. He may feel angry, depressed, and fearful when prices move against him, anxiously waiting to see what the market will do to him next. Traders become crowd members when they feel stressed or threatened. Battered by

emotions, they lose their independence and begin imitating other group members, especially the group leader.

When children feel frightened, they want their parents and other grown-ups to tell them what to do. They transfer that attitude to teachers, doctors, ministers, bosses, and assorted experts. Traders turn to gurus, trading system vendors, newspaper columnists, and other market leaders. But, as Tony Plummer brilliantly pointed out in his book, *Forecasting Financial Markets*, the main leader of the market is price.

Price is the leader of the market crowd. Traders all over the world follow the upticks and downticks. Price seems to say to traders, “Follow me, and I'll show you the way to riches.” Most traders consider themselves independent. Few of us realize how strongly we focus on the behavior of our group leader.

A trend that flows in your favor symbolizes a strong and generous parent calling you to share a meal. A trend that goes against you feels like dealing with an angry and punishing parent. Being gripped by such feelings, it's easy to overlook objective signals that tell you to stay or to exit a trade. You may feel happy or frightened, bargain or beg forgiveness—while avoiding the rational act of accepting reality and getting out of a losing trade.

Independence

You need to base your trades on a carefully prepared plan instead of jumping in response to price changes. A proper plan is a written one. You need to know exactly under what conditions you will enter and exit a trade. Don't make decisions on the spur of the moment, when you are vulnerable to being sucked in by the crowd.

You can succeed as a trader only when you think and act as an individual. The weakest part of any trading system is the trader himself. Traders fail when they trade without a plan or deviate from their plans. Plans are created by reasoning individuals. Impulsive trades are made by sweaty group members.

You have to observe yourself and notice changes in your mental state as you trade. Write down your reasons for entering a trade and the rules for getting out of it, including money management rules. You may not change your plan while you have an open position.

Sirens were sea creatures of Greek myths who sang so beautifully that sailors jumped overboard and swam to them, only to be killed. When Odysseus wanted to hear the Sirens' songs, he ordered his men to seal their ears with beeswax but to tie him to the mast. Odysseus heard the Sirens' song but survived because he couldn't jump overboard. You ensure your survival as a trader when on a clear day you tie yourself to the mast of a trading plan and money management rules.

A Positive Group

You don't have to be a hermit—steering clear of the crowd's impulsivity doesn't mean you have to trade in total solitude. While some of us prefer doing it that way, intelligent and productive groups can exist. Their key feature has to be independent decision making.

This concept is clearly explained in a book, *The Wisdom of Crowds*, by a financial journalist James Surowiecki. He acknowledges that members of most groups constantly influence one another, creating waves of shared feelings and actions. A smart group is different: all members make independent decisions without knowing what others are doing. Instead of impacting each other and creating emotional waves, members of an intelligent group benefit from combining their knowledge and expertise. The function of a group leader is to maintain this structure and to bring individual decisions up for a vote.

In 2004, a year prior to reading *The Wisdom of Crowds*, I organized a group of traders along those lines. I continue to manage it with my friend Kerry Lovvorn—the SpikeTrade group.

We run a trading competition, with each round lasting one week. After the market closes on Friday, the stock picks section of the website becomes closed to viewing by members until 3 p.m. on Sunday. During that time, any group member may submit one favorite pick for the week ahead—without knowing what other group members are doing. The picks section of the website re-opens on Sunday afternoon, allowing all members to see all picks. The race begins on Monday and ends on Friday, with prizes to winners.

Throughout the week members exchange comments and answer questions. The site is built to encourage communication—except for weekends, when

everyone must work independently. The results of leading group members, posted on the site, have been spectacular.

The key point is that all decisions about stock selection and direction must be made in solitude, without seeing what the leaders or other members are doing. The sharing begins after all votes are in. This combination of independent decision making with sharing brings forth “the wisdom of crowds,” tapping the collective wisdom of the group and its leaders.

15. Psychology of Trends

Each price represents a momentary consensus of value among market participants. Each tick reflects the latest vote on the value of a trading vehicle. Any trader can “put in his two cents worth” by giving an order to buy or sell, or by refusing to trade at the current level.

Each price bar or candle reflects a battle between bulls and bears. When buyers feel strongly bullish, they buy more eagerly and push markets up. When sellers feel strongly bearish, they sell more actively and push markets down.

Charts are a window into mass psychology. When you analyze charts, you analyze the behavior of trading masses. Technical indicators help make this analysis more objective.

Technical analysis is for-profit social psychology.

Strong Feelings

Ask a trader why prices went up, and you'll probably get a stock answer—more buyers than sellers. This isn't true. The number of shares or futures contracts bought and sold in any market is always equal.

If you want to buy 100 shares of Google, someone has to sell them to you. If you want to sell 200 shares of Amazon, someone has to buy them from you. This is why the number of shares bought and sold is equal in the stock market. Furthermore, the number of long and short positions in the futures markets is always equal. Prices move up or down not because of different numbers but because of changes in the intensity of greed and fear among buyers and sellers.

When the trend is up, bulls feel optimistic and don't mind paying up. They buy high because they expect prices to rise even higher. Bears feel afraid in an uptrend, and they agree to sell only at a higher price. When greedy and optimistic bulls meet fearful and defensive bears, the market rallies. The stronger their feelings, the sharper the rally. The rally ends only when bulls start losing their enthusiasm.

When prices slide, bears feel optimistic and don't quibble about selling short at lower prices. Bulls are fearful and agree to buy only at a discount. While

bears feel like winners, they continue to sell at lower prices, and the downtrend continues. It ends when bears start feeling cautious and refuse to sell at lower prices.

Rallies and Declines

Few traders are purely rational human beings. There is a great deal of emotion in the markets. Most participants act on the principle of “monkey see, monkey do.” The waves of fear and greed sweep up bulls and bears.

The sharpness of any rally depends on how traders feel. If buyers feel just a little stronger than sellers, the market rises slowly. When they feel much stronger than sellers, the market rises fast. It is the job of a technical analyst to find when buyers are strong and when they start running out of steam.

Short sellers feel trapped by rising markets, as their profits melt and turn into losses. When short sellers rush to cover, a rally can become parabolic. Fear is a much stronger emotion than greed.[2] Rallies driven by short covering are especially sharp, although they do not last very long.

Markets fall because of fear among bulls and greed among bears. Normally bears prefer to sell short on rallies, but if they expect to make a lot of money on a decline, they don't mind shorting on the way down. Fearful buyers agree to buy only below the market. As long as short sellers are willing to meet those demands and sell at a bid, the decline will continue.

As bulls' profits melt and turn into losses, they panic and sell at almost any price. They are so eager to get out that they hit the bids under the market. Markets can drop fast when hit by panic selling.

Price Shocks

Loyalty to the leader is the glue that holds groups together. Group members expect leaders to inspire and reward them when they are good but punish them when they are bad. Some leaders are very authoritarian, others quite democratic and informal, but every group has a leader—a leaderless group can't exist. Price functions as the leader of the market crowd.

Winners feel rewarded when price moves in their favor, and losers feel punished when it moves against them. Crowd members remain blissfully unaware that by focusing on price they create their own leader. Traders who feel mesmerized by prices create their own idols.

When the trend is up, bulls feel rewarded by a bountiful parent. The longer an uptrend lasts, the more confident they feel. When a child's behavior is rewarded, he continues to do what he did. When bulls make money, they add to long positions. While new bulls enter the market, bears feel they are being punished for selling short. Many of them cover shorts, go long, and join the bulls.

Buying by happy bulls and covering by fearful bears pushes uptrends higher. Buyers feel rewarded, while sellers feel punished. Both feel emotionally involved, but few traders realize that they are creating the uptrend and setting up their own leader.

Eventually a price shock occurs—a major sale hits the market, and there aren't enough buyers to absorb it. The uptrend takes a dive. Bulls feel mistreated, like children whose father slapped them during a meal, but bears feel encouraged.

A price shock plants the seeds of an uptrend's reversal. Even if the market recovers and reaches a new high, bulls feel more skittish and bears become bolder. This lack of cohesion in the dominant group and growing optimism among its opponents makes the uptrend ready to reverse. Several technical indicators identify tops by tracing a pattern called bearish divergence (see Section 4). It occurs when prices reach a new high but the indicator reaches a lower high than it did on the previous rally. Bearish divergences mark the ends of uptrends and some of the best shorting opportunities.

When the trend is down, bears feel like good children, praised and rewarded for being smart. They feel increasingly confident, add to short positions, and the downtrend continues. New bears come into the market. People admire winners, and the financial media keeps interviewing bears during bear markets.

Bulls lose money in downtrends, making them feel bad. They start dumping their positions, and some of them switch sides to join bears. Their selling pushes markets lower.

After a while, bears grow confident and bulls feel demoralized. Suddenly, a price shock occurs. A cluster of buy orders soaks up all available sell orders and lifts the market. Now bears feel like children whose father has lashed out at them in the midst of a happy meal.

A price shock plants the seeds of a downtrend's eventual reversal because bears become more fearful and bulls grow bolder. When a child begins to doubt that Santa Claus exists, he'll seldom believe in Santa again. Even if bears recover and prices fall to a new low, several technical indicators will help identify their weakness by tracing a pattern called a bullish divergence. It occurs when prices fall to a new low but an indicator traces a shallower bottom than during the previous decline. Bullish divergences identify some of the best buying opportunities.

Social Psychology

Free will makes individual behavior hard to predict. Group behavior is more primitive and easier to track. When you analyze markets, you analyze group behavior. You need to identify the direction in which groups are running and their changes of speed.

Groups suck us in and cloud our judgment. The problem for most analysts is that they get caught in the emotional pull of the groups they try to analyze.

The longer a rally continues, the more analysts get caught up in mass bullishness, ignore danger signs, and miss the eventual reversal. The longer a decline goes on, the more analysts get caught up in bearish gloom and ignore bullish signs. This is why it helps to have a written plan for analyzing markets. We have to decide in advance what indicators we will watch, how we will interpret them, and how we'll act.

Professionals use several tools for tracking the intensity of the crowd's feelings. They watch the crowd's ability to break through recent support and resistance levels. Floor traders used to listen to the changes in pitch and volume of the roar on the exchange floor. With floor trading rapidly receding into history, you'll need special tools for analyzing crowd behavior. Fortunately, your charts and indicators reflect mass psychology in action. *A technical analyst is an applied social psychologist, usually armed with a computer*.

16. Managing versus Forecasting

I once ran into a very fat surgeon at a seminar. He told me that he had lost a quarter of a million dollars in three years trading stocks and options. When I asked him how he made his trading decisions, he sheepishly pointed to his ample gut. He gambled on hunches and used his professional income to support his habit. There are two alternatives to “gut feel”: One is fundamental analysis; the other is technical analysis.

Fundamental analysts study the actions of the Federal Reserve, follow earnings reports, examine crop reports, and so on. Major bull and bear markets reflect fundamental changes in supply and demand. Still, even if you know those factors, you can lose money trading if you are out of touch with intermediate- and short-term trends, which depend on the crowd's emotions.

Technical analysts believe that prices reflect everything known about the market, including fundamental factors. Each price represents the consensus of value of all market participants—large commercial interests and small speculators, fundamental researchers and technicians, insiders and gamblers.

Technical analysis is a study of mass psychology. It is partly a science and partly an art. Technicians use many scientific methods, including mathematical concepts of game theory, probabilities, and so on. They use computers to track indicators.

Technical analysis is also an art. The bars or candles on our charts coalesce into patterns and formations. The movement of prices and indicators produces a sense of flow and rhythm, a feeling of tension and beauty that helps us sense what is happening and how to trade.

Individual behavior is complex, diverse, and difficult to predict. Group behavior is primitive. Technicians study the behavior patterns of market crowds. They trade when they recognize patterns that preceded previous market moves.

Poll-Taking

Politicians want to know their chances of being elected or re-elected. They make promises to voters and have poll-takers measure a crowd's response. Technical analysis is similar to political poll-taking, as both aim to read the

intentions of masses. Poll-takers do it to help their clients win elections, while technicians do it for financial gain.

Poll-takers use scientific methods: statistics, sampling procedures, and so on. They also need a flair for interviewing and phrasing questions; they have to be plugged into the emotional undercurrents of their party. Poll-taking is a combination of science and art. If a poll-taker says he is a scientist, ask him why every major political poll-taker in the United States is affiliated with either the Democratic or Republican party. True science knows no party.

A market technician must rise above party affiliation. Be neither a bull nor a bear, but only seek the truth. A biased bull looks at a chart and says, “Where can I buy?” A biased bear looks at the same chart and tries to find where he can go short. A top-flight analyst is free of bullish or bearish biases.

There is a trick to help you detect your bias. If you want to buy, turn your chart upside down and see whether it looks like a sell. If it still looks like a buy after you flip it, then you have to work on getting a bullish bias out of your system. If both charts look like a sell, then you have to work on purging a bearish bias.

A Crystal Ball

Many traders believe that their aim is to forecast future prices. The amateurs in most fields ask for forecasts, while professionals simply manage information and make decisions based on probabilities. Take medicine, for example. A patient is brought to an emergency room with a knife wound—and the anxious family members have only two questions: “will he survive?” and “when can he go home?” They ask the doctor for a forecast.

But the doctor isn't forecasting—he is managing problems as they emerge. His first job is to prevent the patient from dying from shock, and so he gives him painkillers and starts an intravenous drip to replace lost blood. Then he sutures damaged organs. After that, he has to watch against infection. He monitors the trend of the patient's health and takes measures to prevent complications. He is managing—not forecasting. When a family begs for a forecast, he may give it to them, but its practical value is low.

To make money trading, you don't need to forecast the future. You have to extract information from the market and find out whether bulls or bears are in control. You need to measure the strength of the dominant market group

and decide how likely the current trend is to continue. You need to practice conservative money management aimed at long-term survival and profit accumulation. You must observe how your mind works and avoid slipping into greed or fear. A trader who does all of this will succeed ahead of any forecaster.

Read the Market, Manage Yourself

A tremendous volume of information pours out of the markets during trading hours. Changing prices reflect the battles of bulls and bears. Your job is to analyze this information and bet on the dominant market group.

Whenever I hear a dramatic forecast, my first thought is “a marketing gimmick.” Advisors issue them to attract attention in order to raise money or sell services. Good calls attract paying customers, while bad calls are quickly forgotten. My phone rang while I was writing the first draft of this chapter. A famous guru, down on his luck, told me that he had identified a “once-in-a-lifetime buying opportunity” in corn. He asked me to raise money for him and promised to multiply it a hundredfold in six months! I do not know how many fools he hooked, but dramatic forecasts have always been good for fleecing the public. Most people do not change. While working on this update 21 years later, I read in *The Wall Street Journal* that this same “guru” was recently punished for professional misconduct by the National Futures Association.

Use common sense in analyzing markets. When some new development puzzles you, compare it to life outside the markets. For example, indicators may give you buy signals in two markets. Should you buy the one that declined a lot before the buy signal or the one that declined a little? Compare this to what happens to a man after a fall. If he falls down a few steps, he may dust himself off and run up again. But if he falls out of a second-story window, he's not going to run anytime soon; he needs time to recover.

Successful trading stands on three pillars. You need to analyze the balance of power between bulls and bears. You need to practice good money management. You need personal discipline to follow your trading plan and avoid getting high or depressed in the markets.

Notes

1. There is plenty of room in the market for both, and occasionally even at the same time. It always amuses me in SpikeTrade when two elite traders pick the same stock—one long and the other short. Often by the end of the week both are profitable, proving that how you manage your trade is more important than what stock and direction you pick.

2. Fear is three times stronger than greed, according to research cited by Prof. Daniel Kahneman, a Nobel Prize winning behavioral economist, whose findings we'll return to again in this book.

PART 3

Classical Chart Analysis

When I bought my first stock, classical charting was the only game in town. I use quad-ruled paper and a sharp pencil to update my charts by hand. A few years later, pocket calculators became available, and I added simple moving averages. Later, a TI programmable calculator made it possible to insert tiny magnetic strips into its slit to perform more complex calculations, such as exponential moving averages and the Directional system.

Finally, an Apple personal computer appeared on the scene; you could use its joystick to move a cursor to draw trendlines. In contrast, today's traders have access to immense analytic power at a very low cost.

While the key concepts of classical charting remain valid, many of its tools have been eclipsed by much more powerful computerized methods. The best quality of computerized technical analysis is its objectivity. A moving average or any other indicator is either rising or falling, and there can be no argument about its direction. You may puzzle over how to interpret its signals, but the signals themselves are clear as day.

Classical charting, on the other hand, is quite subjective, and invites wishful thinking and self-deception. You can draw a trendline across the extreme prices or across the edges of congestion zones, which will change its angle as well as its message. If you're in a mood to buy, you can draw your trendline a little steeper. If you feel like shorting and squint at a chart, you'll “recognize” a head-and-shoulders top. None of those patterns are objective. Because of their subjectivity, I've grown increasingly skeptical of claims regarding classical formations, such as pennants, head-and-shoulders, etc.

After having looked at hundreds of thousands of charts, I've concluded that the market doesn't know diagonals. It remembers price levels, which is why

horizontal support and resistance lines make sense, but diagonal trendlines are subjective and open to self-deception.

In my own trading, I use only a small number of chart patterns that are objective enough to trust. I pay attention to support and resistance zones, based on horizontal price levels. The relationship between the opening and closing prices and between the high and the low points of a price bar or a candle are also objective. I recognize “fingers,” also called “kangaroo tails”— very long bars that protrude from a tight weave of prices. We'll explore these and a few other patterns in this section.

17. Charting

Chartists study market data to identify price patterns and profit from them. Most chartists work with bar or candlestick graphs that show open, high, low, and closing prices and volume. Futures traders also watch open interest. Point-and-figure chartists track only price changes and ignore time, volume, and open interest.

Classical charting requires only a pencil and paper. It appeals to visually oriented people. Those who plot data by hand can develop a physical feel for prices. One of the costs of switching to computerized charting is losing some of that feel.

The biggest problem with classical charting is wishful thinking. Traders seem to identify bullish or bearish patterns, depending on whether they're in a mood to buy or sell.

Early in the twentieth century, Herman Rorschach, a Swiss psychiatrist, designed a test for exploring a person's mind. He dropped ink on 10 sheets of paper and folded each in half, creating symmetrical inkblots. Most people who peer at these sheets describe what they see: parts of the anatomy, animals, buildings, and so on. In reality, there are only inkblots! Each person sees what's on his mind. Most traders use charts as a giant Rorschach test. They project their hopes, fears, and fantasies onto the charts.

Brief History

The first chartists in the United States appeared at the turn of the twentieth century. They included Charles Dow (1851–1902), the author of a famous stock market theory, and William Hamilton, who succeeded Dow as the editor of *The Wall Street Journal*. Dow's famous maxim was “The averages discount everything,” by which he meant that the Industrial and Rail Averages reflected all knowledge about the economy.

Dow never wrote a book, only his *Wall Street Journal* editorials. Hamilton took over the job after Dow died and laid out the principles of Dow theory in his book, *The Stock Market Barometer*. He wrote a famous “The Turn of the Tide” editorial following the 1929 crash. Robert Rhea, a newsletter publisher, brought the theory to its pinnacle in his 1932 book, *The Dow Theory*.

The decade of the 1930s was the Golden Age of charting. Many innovators found themselves with time on their hands after the crash of 1929. Schabacker, Rhea, Elliott, Wyckoff, Gann, and others published their books during that decade. They went in two distinct directions. Some, such as Wyckoff and Schabacker, saw charts as a graphic record of supply and demand. Others, such as Elliott and Gann, searched for a perfect order in the markets—a fascinating but ultimately futile undertaking (see Chapter 5).

In 1948, Edwards (a son-in-law of Schabacker) and Magee published *Technical Analysis of Stock Trends*, in which they popularized such concepts as triangles, rectangles, head-and-shoulders, and other chart formations, as well as support, resistance, and trendlines. Other chartists applied these concepts to commodities.

Markets have changed a great deal since the days of Edwards and Magee. In the 1940s, the daily volume of an active stock on the New York Stock Exchange was only several hundred shares, while now it is measured in millions. The balance of power in the stock market has shifted in favor of bulls. Early chartists wrote that stock market tops were sharp and fast, while bottoms took a long time to develop. That was true in their deflationary era, but the opposite has been true since the 1950s. Now bottoms tend to form quickly, while tops tend to take longer.

The Meaning of a Bar Chart

Chart patterns reflect the sum of buying and selling, greed and fear among investors and traders. Many charts in this book are daily, with each bar representing one trading day, but the rules for understanding weekly, daily, or intraday charts are remarkably similar.

Remember this key principle: "*Each price is a momentary consensus of value of all market participants expressed in action.*" Based on it, each price bar provides several important pieces of information about the tug-of-war between bulls and bears (Figure 17.1).

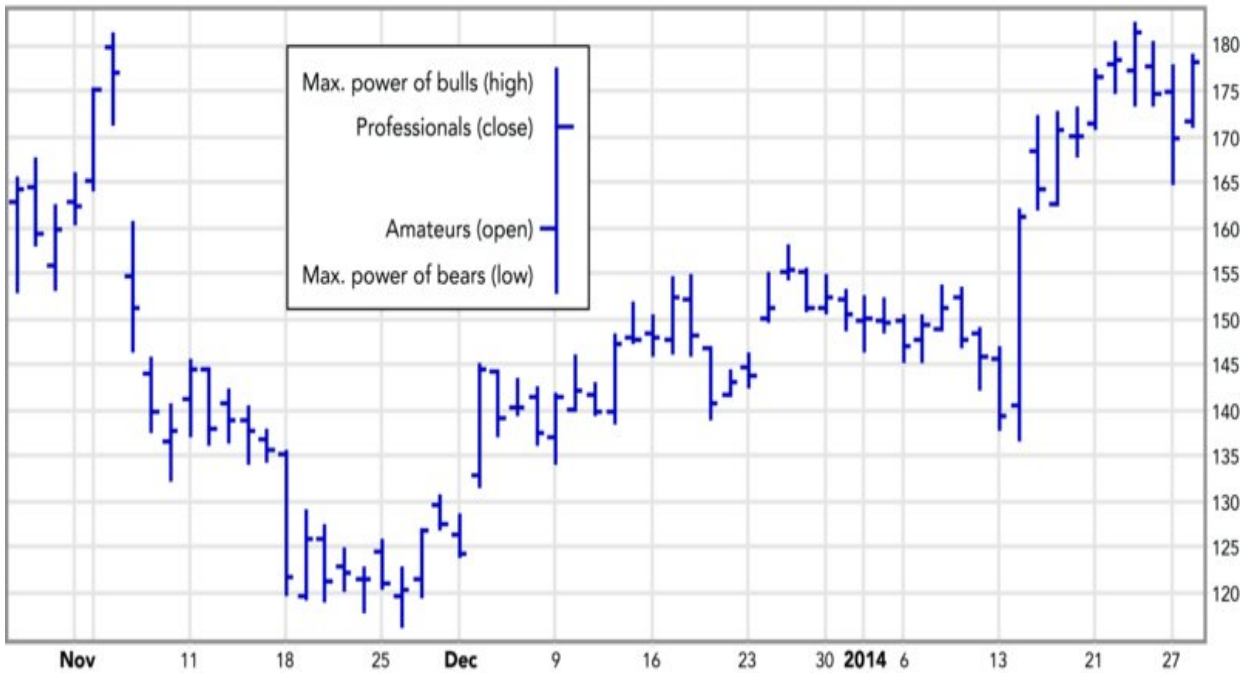


Figure 17.1 TSLA daily. *(Chart by Stockcharts.com)*

The Meaning of a Bar

Chart Opening prices are set by amateurs, whose orders accumulate overnight and hit the market in the morning. Closing prices are largely set by market professionals who trade throughout the day. You can see a reflection of their conflict in how often opening and closing prices occur at the opposite ends of price bars.

The high of each bar marks the maximum power of bulls during that bar. The low of each bar marks the maximum power of bears during that bar. Slippage tends to be less when you enter or exit positions during short bars.

The **opening price** of a daily bar tends to reflect the amateurs' opinion of value. They read morning papers, find out what happened the day before, perhaps ask for a wife's approval to buy or sell, and place their orders before driving to work. Amateurs are especially active early in the day and early in the week.

Traders who researched the relationship between opening and closing prices found that opening prices most often occur near the high or the low of the daily bar. Buying or selling by amateurs early in the day creates an emotional extreme from which prices tend to recoil later in the day.

In bull markets, prices often make their low for the week on Monday or Tuesday, when amateurs take profits from the previous week, then rally to a new high on Thursday or Friday. In bear markets, the high for the week is often set on Monday or Tuesday, with a new low toward the end of the week.

The **closing prices** of daily and weekly bars tend to reflect the actions of professional traders. They watch the markets throughout the day, respond to changes, and tend to dominate the last hour of trading. Many of them take profits at that time to avoid carrying trades overnight.

Professionals as a group usually trade against the amateurs. They tend to buy lower openings, sell short higher openings, and unwind their positions as the day goes on. Traders need to pay attention to the relationship between opening and closing prices. *If prices closed higher than they opened, then market professionals were probably more bullish than amateurs. If prices closed lower than they opened, then market professionals were probably more bearish than amateurs*. It pays to trade with the professionals and against the amateurs. Candlestick charting is based, to a large extent, on the relationship between the opening and closing prices of each bar. If the close is higher, the candle is white, but if it is lower, the candle is black.

The **high of each bar** represents the maximum power of bulls during that bar. Bulls make money when prices go up. Their buying pushes prices higher, and every uptick adds to their profits. Finally, bulls reach a point where they cannot lift prices—not even by one more tick.[1] The high of a daily bar represents the maximum power of bulls during the day, while the high of a weekly bar marks the maximum power of bulls during the week.

The highest point of a bar represents the maximum power of bulls during that bar.

The **low of each bar** represents the maximum power of bears during that bar. Bears make money when prices decline. They keep selling short, their selling pushes prices lower, and every downtick adds to their profits. At some point they run out of either capital or enthusiasm, and prices stop falling. The low of a daily bar marks the maximum power of bears during that day, and the low of a weekly bar identifies the maximum power of bears during that week.

The low of each bar shows the maximum power of bears during that bar.

The **closing price of each bar** reveals the outcome of the battle between bulls and bears during that bar. If prices close near the high of the daily bar, it shows that bulls won the day's battle. If prices close near the low of the day, it shows that bears won the day. Closing prices on the daily charts of futures are especially important because your account equity is “marked to market” each night.

The **distance between the high and the low** of any bar reflects the intensity of conflict between bulls and bears. An average bar marks a relatively cool market. A bar that's only half as tall as average reveals a sleepy, disinterested market. A bar that's two times taller than average shows a boiling market where bulls and bears battle all over the field.

Slippage (see the Introduction) tends to be less in quiet markets. It pays to enter trades during short or normal bars. Tall bars are good for taking profits. Trying to enter a position when the market is running is like jumping onto a moving train. It would be safer to wait for the next one.

Japanese Candlesticks

Japanese rice traders began using candlestick charts some two centuries before the first chartists appeared in America. Instead of bars, their charts had rows of candles with wicks at both ends. The body of each candle represents the distance between the opening and closing prices. If the closing price is higher than the opening, the body is white, but if the closing price is lower, the body is black.

The tip of the upper wick represents the high of the day, while the bottom of the lower wick represents the low of the day. The Japanese consider highs and lows relatively unimportant, according to Steve Nison, author of *Japanese Candlestick Charting Techniques*. They focus on the relationship between opening and closing prices and on patterns that include several candles.

The main advantage of a candlestick chart is its focus on the struggle between amateurs who control openings and professionals who control closings. Unfortunately, many candlestick chartists neglect Western tools, such as volume and technical indicators.

Candlesticks have become quite popular worldwide, and some traders ask me why I continue to use bar charts. I am familiar with candlesticks, but I've

learned to trade using bar charts, and I believe that using open-high-low-close bars plus technical indicators gives me more information.

Your choice of a bar or a candlestick chart is a matter of personal preference. All concepts expressed in this book can be used with candlestick as well as bar charts.

Efficient Markets, Random Walk, Chaos Theory, and “Nature's Law”

Efficient Market theory is an academic notion that nobody can outperform the market because any price at any given moment incorporates all available information. Warren Buffett, one of the most successful investors of the century, commented: “I think it's fascinating how the ruling orthodoxy can cause a lot of people to think the earth is flat. Investing in a market where people believe in efficiency is like playing bridge with someone who's been told it doesn't do any good to look at the cards.”

The logical flaw of Efficient Market theory is that it equates knowledge with action. People may have knowledge, but the emotional pull of the crowd often leads them to trade irrationally. A good analyst can detect repetitive patterns of crowd behavior on his charts and exploit them.

Random Walk theorists claim that market prices change at random. Sure, there is a fair bit of randomness or “noise” in the markets, just as there is randomness in any crowd. Still, an intelligent observer can identify repetitive behavior patterns of a crowd and make sensible bets on their continuation or reversal.

People have memories; they remember past prices, and their memories influence their decisions to buy or sell. Memories help create support under the market and resistance above it. Random Walkers deny that memories influence our behavior.

As Milton Friedman pointed out, prices carry information about the availability of supply and the intensity of demand. Market participants use that information when deciding to buy or sell. For example, consumers buy more merchandise when it is on sale and less when prices are high. Financial traders are just as capable of logical behavior as homemakers. When prices are low, bargain hunters step in. A shortage can lead to a buying panic, but high prices choke off demand.

Chaos Theory has achieved prominence in the recent decades. Markets are largely chaotic, and the only time you can have an edge is during orderly periods.

In my view, markets are chaotic much of the time, but out of that chaos, islands of order and structure keep emerging and disappearing. The essence of market analysis is recognizing the emergence of orderly patterns and having enough courage and conviction to trade them.

If you trade during chaotic periods, the only ones to benefit will be your broker, who'll collect his commission, and a professional day-trader, who'll scalp you. The key point to keep in mind is that once in a while a pattern emerges from chaos. Your system should recognize this transition, and that's when you should put on a trade! Earlier we spoke about the one great advantage of a private trader over professionals—he may wait for a good trade instead of having to be active each day. The chaos theory confirms that message.

The chaos theory also teaches us that orderly structures that emerge from chaos are fractal. The sea coast appears equally jagged whether you look down on it from space or an airplane, from a standing position or on your knees through a magnifying glass. Market patterns are fractal as well. If I show you a set of charts of the same market, having removed time markings, you will not be able to tell whether it is monthly, weekly, daily, or a 5-minute chart. Later in this book (Chapter 39), we'll return to this theme, and you'll see why it is so important to analyze markets in more than one timeframe. We'll have to make sure that buy or sell messages in both timeframes confirm each other, because if they don't it means that the market is too chaotic and we should stand aside.

Nature's Law is the rallying cry of a clutch of mystics who claim there is a perfect order in the markets (which they'll reveal to you for a price). They say that markets move like clockwork in response to immutable natural laws. R. N. Elliott even titled his last book *Nature's Law*.

The “perfect order” crowd gravitates to astrology, numerology, conspiracy theory, and other superstitions. Next time someone talks to you about natural order in the markets, ask him about astrology. He'll probably jump at the chance to come out of the closet and talk about the stars.

The believers in perfect order in the markets claim that tops and bottoms can be predicted far into the future. Amateurs love forecasts, and mysticism is a great marketing gimmick. It helps sell courses, trading systems, and newsletters.

Mystics, Random Walk academics, and Efficient Market theorists have one trait in common. They are equally divorced from the reality of the markets.

18. Support and Resistance

A ball hits the floor and bounces. Toss it up, and it'll drop after hitting the ceiling. Support and resistance are like a floor and a ceiling, with prices sandwiched between them. Understanding support and resistance is essential for understanding price trends. Rating their strength helps you decide whether the trend is likely to punch through or to reverse.

Support is a price level where buying is strong enough to interrupt or reverse a downtrend. When a downtrend hits support, it bounces like a diver who hits the bottom and pushes away from it. Support is represented on a chart by a horizontal line connecting two or more bottoms (Figure 18.1).

Figure 18.1 NFLX weekly. (*Chart by Stockcharts.com*)

Support and Resistance

Draw horizontal lines across the upper and lower edges of congestion areas. The bottom line marks the level of support at which buyers overcome sellers. The upper line identifies resistance, where sellers overpower buyers. Support and resistance areas often switch roles. Note how after a decisive upside breakout in area 1 prices hit resistance, but when they broke above that level it turned into a zone of support (marked 2). The strength of these barriers increases each time prices touch them and bounce away.

Beware of false breakouts from support and resistance. They are marked by letter “F” on this chart. Amateurs tend to follow breakouts, while professionals tend to fade (trade against) them. At the right edge of the chart NFLX is rallying from support at the level where its previous rally ran into resistance.

Resistance is a price level where selling is strong enough to interrupt or reverse an uptrend. When an uptrend hits resistance, it acts like a man who hits his head on a branch while climbing a tree—he stops and may even tumble down. Resistance is represented on a chart by a horizontal line connecting two or more tops.

It is better to draw support and resistance lines across the edges of congestion areas where the bulk of the bars stopped rather than across extreme prices. Those congestion zones show where masses of traders have changed their minds, while the extreme points reflect only panic among the weakest traders.

Minor support or resistance causes trends to pause, while major support or resistance causes them to reverse. Traders buy at support and sell at resistance, making their effectiveness a self-fulfilling prophecy.

How do we identify trends? Not by **trendlines**. My favorite tools are exponential moving averages that we'll review in the next section. Trendlines are wildly subjective—they are among the most self-deceptive tools. Trend identification is an area in which computerized analysis is miles ahead of classical charting.

Memories, Pain, and Regret

Our memories of previous market turns prompt us to buy and sell at certain levels. Buying and selling by crowds create support and resistance. *Support and resistance exist because people have memories*.

If traders remember that prices have recently stopped falling and turned up from a certain level, they are likely to buy when prices approach that level again. If traders remember that an uptrend has recently reversed after rising to a certain peak, they tend to sell and go short when prices approach that level again.

For example, all major rallies in the stock market from 1966 until 1982 ended whenever the Dow Jones Industrial Average rallied into the area between 950 and 1050. That resistance zone was so strong that traders named it “a graveyard in the sky.” Once the bulls rammed the market through that level, it became a major support area. In recent years, we saw a similar occurrence in gold, whose chart is shown here (Figure 18.2). It hit the level of $1,000/oz four times, dropping after each attempt. After the price of gold broke above that level on its fifth attempt, the level of $1,000/oz turned into a massive support level.

Figure 18.2 Gold weekly. (*Chart by Stockcharts.com*)

Resistance Turns into Support

Notice how gold hit its overhead resistance at the $1,000/oz. level five times. Usually, reversals occur on the first, second or third hit. When a market hits the same level for the fourth time, it shows that it really wants to go that way. Gold broke above $1,000/oz. on its fifth attempt.

Afterwards, gold made two attempts to pull down to its old resistance level, in areas marked 6 and 7. Its inability to decline to that level showed that bears were weak, marking the start of a major bull market in gold.

Support and resistance exist because masses of traders feel pain and regret. Traders who hold losing positions feel intense pain. Losers are determined to

get out as soon as the market gives them another chance. Traders who missed an opportunity to buy or sell short feel regret and also wait for the market to give them a second chance. Feelings of pain and regret are mild in trading ranges when swings are relatively small and losers do not get hurt too badly. Breakouts from those ranges create much more intense pain and regret.

When the market stays flat for a while, traders get used to buying near the lower edge of its range and selling or even shorting near the upper edge. When an uptrend begins, bears who sold short feel a great deal of pain. At the same time bulls feel an intense regret that they didn't buy more. Both are determined to buy if the market declines to the breakout point and gives them a second chance to cover shorts or to get long. The pain of bears and regret of bulls makes them eager to buy, creating **support** during reactions in an uptrend.

When prices break down from a trading range, bulls who bought are in pain: they feel trapped and wait for a rally to get out even. Bears, on the other hand, regret that they haven't shorted more: they wait for a rally as a second chance to sell short. Bulls' pain and bears' regret create **resistance**—a ceiling above the market in downtrends. The strength of support and resistance depends on the strength of feelings among masses of traders.

Strength of Support and Resistance

The longer prices stay in a congestion zone, the stronger the emotional commitment of bulls and bears to that area. A congestion area hit by several trends is like a battlefield with craters from explosions: its defenders have plenty of cover and are likely to slow down any attacking force. When prices approach that zone from above, it serves as support. When prices rally into it from below, it acts as resistance. A congestion area can reverse those roles, serving as either support or resistance.

The strength of those zones depends on three factors: their length, height, and the volume of trading that has taken place in them. You can visualize these factors as the length, the width, and the depth of a congestion zone.

The longer a support or resistance area—its length of time or the number of hits it took—the stronger it is. Support and resistance, like good wine, become better with age. A 2-week trading range provides only minimal support or resistance, a 2-month range gives people time to become used to

it and creates intermediate support or resistance, while a 2-year range becomes accepted as a standard of value and offers major support or resistance.

As support and resistance levels grow very old, they gradually become weaker. Losers keep washing out of the markets, replaced by newcomers who don't have the same emotional commitment to very old price levels. People who lost money only recently remember full well what happened to them. They are probably still in the market, feeling pain and regret, trying to get even. People who made bad decisions several years ago may well be out of that market, and their memories matter less.

The strength of support and resistance increases each time that area is hit. When traders see that prices have reversed at a certain level, they tend to bet on a reversal the next time prices reach that level.

The taller the support and resistance zone, the stronger it is. A tall congestion zone is like a tall fence around a property. If a congestion zone's height equals one percent of current market value, it provides only minor support or resistance. If it's three percent tall, it provides intermediate support or resistance, and a congestion zone that's seven percent tall or higher can grind down a major trend.

The greater the volume of trading in a support and resistance zone, the stronger it is. High volume shows active involvement by traders—a sign of strong emotional commitment. Low volume shows that traders have little interest in transacting at that level—a sign of weak support or resistance.

You can measure the strength of support and resistance in dollars if you multiply the number of days a stock spent in its congestion zone by its average daily volume and price. Of course, when making such comparisons, we should measure support and resistance zones for the same stock. You can't compare apples with oranges or AAPL with some $10 stock that trades a million shares on a good day.

Trading Rules

1. Whenever the trend you're riding approaches support or resistance, tighten your protective stop.
   A **protective stop** is an order to sell below the market when you are long or to cover shorts above the market when you are short. A stop

protects you from getting badly hurt by a reversal.
A trend reveals its health by how it acts when it hits support or resistance. If it's strong enough to penetrate that zone, your tight stop will not be triggered. If a trend bounces away from support or resistance, it reveals its weakness. In that case, your tight stop will salvage a good chunk of profits.

2. Support and resistance are more important on long-term charts than on short-term charts.
   A good trader monitors his market using several timeframes, but assigns more weight to the longer ones. Weekly charts are more important than dailies. If the weekly trend is strong, it is less alarming that the daily trend is hitting resistance. When a weekly trend approaches major support or resistance, you should be more inclined to exit.

3. Support and resistance levels point to trading opportunities.
   The bottom of a congestion area identifies the bottom line of support. As prices decline towards it, be alert to buying opportunities. One of the best patterns in technical analysis is a **false breakout**. If prices dip below support and then rally back into the support zone, they show that bears have lost their chance. A price bar closing within a congestion zone after a false downside breakout marks a buying opportunity; set a protective stop in the vicinity of the bottom of the recent false downside breakout.
   Similarly, a true upside breakout should not be followed by a pullback into the range, just as a rocket is not supposed to sink back to its launching pad. A false upside breakout gives a signal to sell short as a price bar returns into the congestion zone. When shorting, place a protective stop near the top of the false breakout (Figure 18.3).

EGO
6.70
6.65
6.60
6.55
6.50
6.45
6.40
6.35
6.30
6.25
6.20
6.15
6.10
6.05
6.00
5.95
5.90
5.85
5.80
5.75
5.70
5.65
5.60
5.55
5.50
5.45
5.40
5.35
Dec
9
16
23
30
2014
6
13

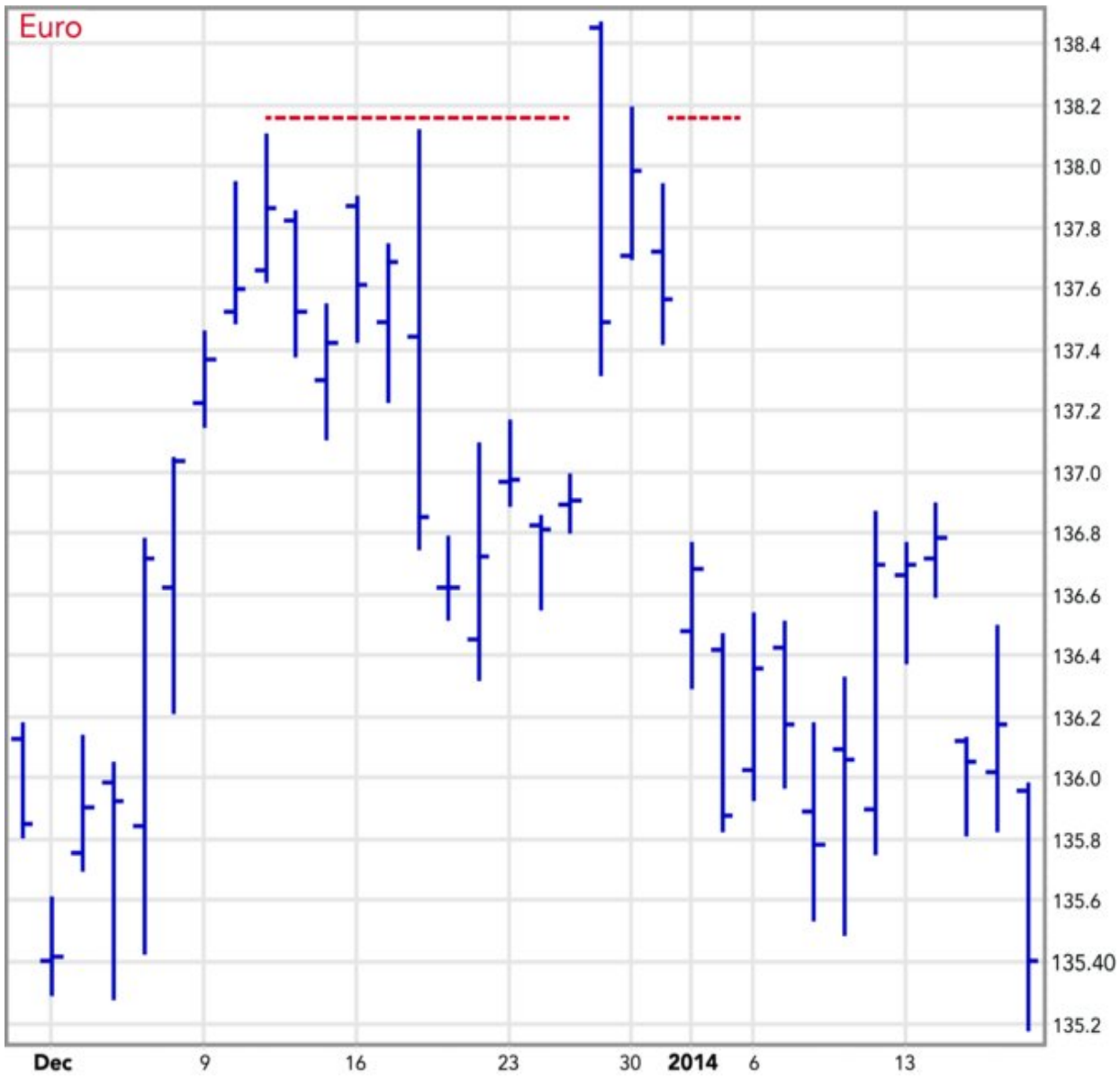


Figure 18.3 EGO and the Euro daily. *(Chart by Stockcharts.com)*

False Breakouts

On the left, a chart of Eldorado Gold Corp. (EGO) shows a false downside breakout during gold bears' final attempt to push gold stocks lower in December 2013. Prices opened sharply below support, having gapped down from the previous day's close. From there, a rally began. Notice a pullback to the support line a week later, marked by a green arrowhead. Such pullbacks don't always occur, but when they do, they offer an excellent opportunity to hop aboard a new trend.

On the right, a chart of the Euro (represented here by $XEU) shows how an uptrend culminated in a false upside breakout. Prices gapped above the line of resistance, triggering stops and shaking out weak shorts, and that's when the downtrend began. There was no second chance pullback in this market.

On Placing Stops Experienced traders tend to avoid placing them at round numbers. If I buy a stock near $52 and want to protect my position in the area of 51, I'll put a stop a few cents below $51. If I go long at 33.70 in a day-trade and want to protect my position in the area of $33.50, I'll put that stop a few cents below $33.50. Because of a natural human tendency to use round numbers, clusters of stops accumulate there. I prefer to place my stops at the far ends of such clusters.

True and False Breakouts

Markets spend more time in trading ranges than in trends. Most breakouts from trading ranges are false breakouts. They suck in trend-followers just before prices return into their ranges. False breakouts hurt amateurs, but professional traders love them.

Professionals expect prices to fluctuate most of the time, without going anywhere far. They wait until an upside breakout stops reaching new highs or a downside breakout stops making new lows. Then they pounce—fade the breakout (trade against it) and place a protective stop near the latest extreme point. It's a tight stop, and their monetary risk is low, with a big profit potential from prices returning towards the middle of the congestion zone. The risk/reward ratio is so good that professionals can afford to be wrong half the time and still come out ahead of the game.

The best time to buy an upside breakout on a daily chart is when your analysis of the **weekly** chart suggests that a new uptrend is developing. True breakouts are confirmed by heavy **volume**, while false breakouts tend to have light volume. True breakouts are confirmed when technical **indicators** reach new extremes in the direction of the new trend, while false breakouts are often marked by divergences between prices and indicators, which we'll discuss later in the book.

19. Trends and Trading Ranges

A **trend** exists when prices keep rising or falling over a period of time. In a perfect **uptrend**, each rally reaches a higher high than the preceding rally, while each decline stops at a higher level than the preceding decline. In a perfect **downtrend**, each decline falls to a lower low than the preceding decline and each rally tops out at a lower level than the preceding rally. In a **trading range**, most rallies stop at about the same high level, and declines peter out at about the same low level. Perfect patterns, of course, aren't that common in financial markets, and multiple deviations make life harder for analysts and traders (Figure 19.1).

Figure 19.1 FB daily, 22-day EMA. *(Chart by Stockcharts.com)*

Trend and the Trading Range

A pattern of higher tops and higher bottoms defines uptrends, while a pattern of lower bottoms and lower tops defines downtrends. In the middle of this chart of Facebook, Inc. (FB), you see a downtrend defined by three lower lows, marked 1, 3, and 5, and two lower highs, marked 2 and 4. Notice the downtrend of a slow 22-day exponential moving average (which we'll review in Chapter 22) confirming the price downtrend. Its upturn signaled an upside reversal, confirmed by new price peaks 6 and 8.

We've looked at false breakouts in the previous chapter, and you can see them again in action here. False breakouts occur when prices cross their support or resistance lines, spend one or two days beyond that line, and then return, marking a failed move in the direction of the breakout; afterwards prices tend to turn in the opposite direction. Here, a false downside breakout, followed by the upturn of a moving average gave a strong buy signal.

We see a mirror image of this pattern after the top 8. There are two false upside breakouts, and after the second one, the moving average turns down, giving a sell signal. At the right edge of the chart, prices are pulling back up to their declining moving average. Such patterns tend to create good opportunities for selling short.

Even a quick look at most charts reveals that markets spend most of the time in trading ranges. Trends and trading ranges call for different tactics. When you go long in an uptrend or sell short in a downtrend, you have to give that trend the benefit of the doubt and use a wider stop, so as not to be shaken out easily. In a trading range, on the other hand, you have to use tight stops, be nimble and close out positions at the slightest sign of a reversal.

Another difference in trading tactics between trends and ranges is the handling of strength and weakness. You have to follow strength during trends—buy in uptrends and short in downtrends. When prices are in a trading range, you aim to do the opposite—buy weakness and sell strength.

Mass Psychology

When the trend is up, bulls are more eager than bears, and their buying forces prices higher. If bears manage to push prices down, bulls return to bargain hunt. They stop the decline, and force prices to rise again. A downtrend occurs when bears are more aggressive and their selling pushes markets down. Whenever a flurry of buying lifts prices, bears sell short into that rally, stop it, and send prices to new lows.

When bulls and bears are about equal in strength, prices stay in a trading range. When bulls manage to push prices up, bears sell short into that rally and prices fall. As they decline, bargain hunters step in and buy. Then, as bears cover shorts, their buying helps fuel a rally. This cycle can go on for a long time.

A trading range is like a fight between two equally strong street gangs. They push one another back and forth, but neither can control the city block. A trend is like a fight in which a stronger gang chases the weaker gang down the street. Every once in a while the weaker gang stops and puts up a fight but then turns and runs again.

Crowds spend most of their time aimlessly milling around, which is why markets spend more time in trading ranges than in trends. A crowd has to become agitated and surge to create a trend. Crowds do not stay excited for long—they go back to aimlessness. Professionals tend to give the benefit of the doubt to trading ranges.

The Hard Right Edge

Trends and ranges are easy to see in the middle of a chart, but as you get close to its right edge, the picture becomes increasingly foggy. The past is fixed and clear, but the future is fluid and uncertain. Trends are easy to recognize on old charts, but, unfortunately, our brokers don't allow us to trade in the past—we have to make trading decisions at the hard right edge.

By the time a trend becomes perfectly clear, a good chunk of it is already gone. Nobody will ring a bell when a trend dissolves into a trading range.

Many chart patterns and indicator signals contradict one another at the right edge of the chart. You have to base your decisions on probabilities in an atmosphere of uncertainty.

Most people feel very uncomfortable dealing with uncertainty. When their trade doesn't go the way their analysis suggested, they hang onto losing positions, waiting for the market to turn and make them whole. Trying to be right is an unaffordable luxury in the markets. Professional traders get out of losing trades fast. When the market deviates from your analysis, you have to cut losses without fuss.

Methods and Techniques

Keep in mind that there is no single magic method to clearly and reliably identify all trends and trading ranges. It pays to combine several analytic tools. None of them is perfect, but when they confirm each another, a correct message is much more likely. When they contradict one another, it's better to pass up a trade.

1. Analyze the pattern of highs and lows. When rallies keep reaching higher levels and declines keep stopping at higher levels, they identify an uptrend. The pattern of lower lows and lower highs identifies a downtrend, and the pattern of irregular highs and lows points to a trading range (Figure 19.1).
2. Plot a 20- to 30-bar exponential moving average (see Chapter 22). The direction of its slope identifies the trend. If a moving average has not reached a new high or low in a month, then the market is probably in a trading range.
3. When an oscillator, such as MACD-Histogram (see Chapter 23) rises to a new peak, it identifies a powerful trend and suggests that the latest market top is likely to be retested or exceeded.
4. Several market indicators, such the Directional system (see Chapter 24), help identify trends. The Directional system is especially good at catching early stages of new trends (Figure 19.2).

Figure 19.2 UNP daily, 22-day EMA, Directional system, *MACD-Histogram*. *(Chart by Stockcharts.com)*

Trend Identification

The single most important identifier of any trend is the pattern of its highs and lows. Look, for example, at this daily chart of Union Pacific Corp (UNP). Once it broke out of its trading range, its highs, marked by horizontal green lines, kept reaching higher and higher. Similarly, its reaction lows, marked by red horizontal lines, kept bottoming out at higher and higher levels. Trying to draw a trendline would be a very subjective exercise because the bottoms of UNP did not line up in a straight line.

The 22-day exponential moving average (EMA), represented by a red line superimposed on prices, confirms the uptrend by its steady rise. Notice excellent buying opportunities, signaled by quick price dips to their moving average (we'll return to this pattern in Chapter 22).

The Directional system (described in Chapter 24) signaled the start of a new trend when the Average Directional Index (ADX) fell below 20 and then rallied above that level and penetrated above the lower Directional Line (marked by a vertical green arrow). MACD-Histogram (described in Chapter 23) identified a very powerful trend when it rallied to its highest peak in several months (marked by a diagonal green arrow). Near the right edge of the chart the trend is up, while prices are slightly below their recent high. A pullback to the EMA is likely to create a fresh buying opportunity.

Trade or Wait

Having identified an uptrend, you need to decide whether to buy immediately or wait for a dip. If you buy fast, you'll get in gear with the trend, but on the minus side, your stops are likely to be farther away, increasing your risk.

If you wait for a dip, your risk will be smaller, but you'll have four groups of competitors: longs who want to add to their positions, shorts who want to get out even, traders who never bought (such as yourself), and traders who sold too early but are eager to buy again. The waiting areas for pullbacks are notoriously crowded! Furthermore, a deep pullback may signal the beginning of a reversal rather than a buying opportunity. The same reasoning applies to shorting in downtrends.

If the market is in a trading range and you're waiting for a breakout, you'll have to decide whether to buy in anticipation of a breakout, during a breakout, or on a pullback after a valid breakout. If you aren't sure, consider entering in several steps: buy a third of the planned position in anticipation, a third on a breakout, and a third on a pullback.

Whatever method you use, remember to apply the key risk management rule: the distance from your entry to the protective stop, multiplied by position size can never be more than 2 percent of your account equity (see Chapter 50). No matter how attractive a trade, pass it up if it would require putting more than 2% of your account at risk.

Finding good entry points is extremely important in trading ranges. You have to be very precise and nimble because the profit potential is limited. A trend is more forgiving of a sloppy entry, as long as you trade in the right direction. Old traders chuckle: “Don't confuse brains with a bull market.”

Specific risk management tactics are different for trends and trading ranges. When trend trading, it pays to put on smaller positions with wider stops. You'll be less likely to get shaken out by any counter-trend moves, while still controlling risk. You may put on bigger positions in trading ranges but with tighter stops.

Conflicting Timeframes

Markets move in several timeframes at the same time (see Chapter 32). They move simultaneously, and sometimes in the opposite directions on 10-minute, hourly, daily, weekly and monthly charts. The market may look like a buy in one timeframe but a sell in another. Even indicator signals in different timeframes of the same stock may contradict one another. Which will you follow?

Most traders ignore the fact that markets move in different directions at the same time in different timeframes. They pick one timeframe, such as daily or hourly, and look for trades there. That's when trends from other timeframes sneak up on them and wreak havoc with their plans.

Those conflicts between signals in different timeframes of the same market are one of the great puzzles in market analysis. What looks like a trend on a daily chart may show up as a blip on a flat weekly chart. What looks like a flat trading range on a daily chart shows rich uptrends and downtrends on an hourly chart, and so on.

The sensible course of action is this: before examining a trend on your favorite chart, step back to explore the charts in a timeframe one order of magnitude greater than your favorite. This search for a greater perspective is one of the key principles of the Triple Screen trading system, which we'll discuss in a later chapter.

When professionals are in doubt, they look at the big picture, while amateurs tend to focus on the short-term charts. Taking a longer view works better — and is a lot less nerve-wracking.

20. Kangaroo Tails

Just when you think a runaway trend will keep on going—pop!—a three-bar pattern forms a kangaroo tail that flags a reversal. A kangaroo tail[2] consists of a single, very tall bar, flanked by two regular bars, that protrudes from a tight weave of prices. Upward-pointing kangaroo tails flash sell signals at market tops, while downward-pointing kangaroo tails occur at market bottoms (Figure 20.1).

Figure 20.1 BIIB and FDO daily. *(Chart by Stockcharts.com)*

Kangaroo Tails

Biogen Idec, Inc (BIIB) was rising in a steady uptrend when it developed an upward kangaroo tail. The stock opened slightly below its previous close but then traced a very tall bar, triple the average height. It reached a record new high but then slid, closing near its opening price. The next day's bar was of average height—it completed the kangaroo pattern and the trend reversed down.

The stock of Family Dollar Stores, Inc. (FDO) was falling when its decline sharply accelerated, producing a downward pointing bar several times the

average bar height for this stock. Notice that both opening and closing prices for that bar were well within the previous day's range. That downward stab marked the end of the downtrend; the next bar was of average height and after that the trend reversed up.

While daily charts are shown in the illustration, you can find kangaroo tails on the charts of all timeframes. The longer the timeframe, the more meaningful its signal: a kangaroo tail on a weekly chart is likely to lead to a more significant move than a tail on a 5-minute chart.

Kangaroo tails, also called “fingers,” are on my short list of reliable chart formations. They leap at you from the charts and are easy to recognize. If you doubt whether a kangaroo tail is present, assume it is not. Real kangaroo tails are unmistakable. They occur in the broad market indexes as well as individual stocks, futures, and other trading vehicles.

Markets constantly fluctuate, seeking levels that generate the highest volume of trade. If a rally attracts no orders, the market will reverse and look for orders at lower levels. If volume dries up during a decline, the market is likely to rally, seeking orders at higher prices.

Kangaroo tails reflect failed bull or bear raids.

A kangaroo tail pointing up reflects a failed attempt by the bulls to lift the market. They're like a group of soldiers that take a hill from the enemy, only to discover that the main force has failed to follow. Now they escape and run downhill for their lives. Having failed to hold the hill, the army is likely to move away from it.

A kangaroo tail that points down reflects a failed bear raid. Bears aggressively sold the market, pushing it lower—but low prices did not attract volume and bears retreated back into the range. What do you think the market is likely to do next, after it failed to continue moving down? Since it found no orders below, it's likely to turn up and rally.

When markets recoil from kangaroo tails, they offer trading opportunities. It was J. Peter Steidlmayer who pointed out years ago that a bar that looks like a finger sticking out of a tight chart pattern provides a valuable reference point for short-term traders. A kangaroo tail shows that a certain price has been rejected by the market. It usually leads to a swing in the opposite direction. As soon as you recognize a tail, trade against it (Figure 20.2).

Figure 20.2 IGT Daily. *(Chart by Stockcharts.com)*

Trading Kangaroo Tails.

Kangaroo tails mark the final splash of bullishness or bearishness, depending on their direction. Here the kangaroo tail (marked with a red arrow) helped identify the end of an uptrend in the stock of International Game Technology (IGT). Notice the bar is more than double the usual height and is bracketed by shorter bars. If entering a short trade during the third bar, place your stop about half-way up the tail. Putting a stop at the tip of the tail would mean accepting too much risk.

Notice a tail pointing down, marked by a green arrow. It stopped the downtrend and augured in a week-long rally.

An experienced trader can recognize a kangaroo tail during its third bar, before it closes. For example, you may see a range that held for several days on a daily chart, but then on Monday the stock explodes in a very tall bar. If on Tuesday it opens near the base of the Monday's bar base and refuses to rally, consider selling short before the market closes on Tuesday. If the market has been in a trading range for a week and then traces a tall bar down on Wednesday, get ready on Thursday: if prices trade in a narrow range near the top of the Wednesday bar, go long before the market closes on Thursday.

Remember that trading against the tails is a short-term tactic; on the daily charts, these signals fizzle out after a few days. Evaluate kangaroo tails against the background of the current market. For example, when running a long-term bullish campaign in a stock, be alert to kangaroo tails. A tail pointing up may well suggest profit taking on existing positions, while a tail pointing down identifies a good spot to add to long positions.

Using stops is essential for survival and success in the markets. Putting a stop at the end of a tail would make your stop too wide, risking too much capital. When trading against the tail, place your protective stop about halfway through the tail. If the market starts “chewing its tail,” it is time to get out.

Notes

1. A tick is the smallest price change allowed for any given trading vehicle. It may be one cent or even one hundredth of a cent (depending on the stock), a quarter point for S&P e-minis, 10 cents for gold futures, etc.

2. I am grateful to Margarita Volkova, my translator in Moscow, who came up with this name for the pattern.

PART 4

Computerized Technical Analysis

Computers were a novelty at the time I wrote *Trading for a Living*. My first computer for technical analysis was an Apple 2E desktop with a boxy modem and two floppy drives. Each held a 300 KB diskette: one for the analytic program (Computrac, the first program for technical analysis) and the other for market data. When the first hard drives came out, I had a choice of buying a 2-, 5- or 10-MB (not gigabyte!) drive. Ten megabytes seemed too huge for anyone to ever need, so I sprang for a 5-MB hard drive. How technology has changed!

A trader without a computer is like a man traveling on a bicycle. His legs grow strong and he sees a lot of scenery, but his progress is slow. When you travel on business and want to get to the point fast, you get a car.

Today, very few people trade without computers. Our machines help track and analyze more markets in greater depth. They liberate us from the routine updating of charts, freeing up time for thinking. Computers allow us to use more complex indicators and spot more opportunities. Trading is an information game. A computer helps you process more information. On the minus side, with computers we lose a physical feel for price moves that comes from pencil and paper charting.

21. Computers in Trading

Computerized technical analysis is more objective than classical charting. You can argue whether support or resistance is present—but there can be no argument about an indicator's direction. Of course, you still need to decide what to do after you identify an indicator's message.

Toolboxes

When working with wood or metal, you can go to a hardware store and buy a set of tools that can help you work smartly and efficiently. A technical analysis toolbox provides a set of electronic tools for processing market data.

When you decide to get into computerized technical analysis, begin by drawing a list of tasks you want your computer to perform. This will take some serious thinking, but it's much better than getting a package first and scratching your head later, trying to figure out what it might do for you. Decide what markets you want to track, what types of charts to view and what indicators to use.

A toolbox draws weekly, daily, and intraday charts; it splits the screen into several windowpanes for plotting prices and indicators. A good toolbox includes many popular indicators, such as moving averages, channels, MACD, Stochastic, Relative Strength Index, along with dozens if not hundreds of others. It allows you to modify all indicators and even construct your own.

A good toolbox allows you to compare any two markets and analyze their spreads. If you trade options, your toolbox must include an options valuation model. Advanced packages allow you to backtest trading systems.

Another feature of a good toolbox is its ability to scan stocks. For example, you may want to find all stocks among the Nasdaq 100 whose exponential moving averages are rising, but whose prices are no more than 1% above their EMAs. Can your software scan for that? Can it add fundamental parameters to your search, such as rising earnings? Think what you want to find and then ask software vendors whether their products can do it for you.

There are good toolboxes at all price levels. A beginner making his first steps may sign up with an online service that offers a basic set of computerized tools for free; you can upgrade to a paid level later. Most

charts in this book are drawn using just such a service, StockCharts.com, because I want you to see how much you can do while spending very little. Some traders find that sufficient, while many of us buy programs that reside on our computers, allowing greater customization. With prices of software in a steady decline, you don't have to worry too much. Buy something simple and inexpensive and upgrade later—it's a date, not a marriage.

Once you've decided what package to use, you may want to hire somebody who already uses it to help you set it up on your machine. This can save a great deal of time and energy for inexperienced users.

A growing number of brokerage firms offer free analytic software to their clients; the price is right, but they tend to have two serious limitations. First, for legal reasons, they make their software very hard to modify and second, it only works online. Traders often ask how to add my indicators to their brokerage software, and the usual answer is—you can't.

Most brokerage house programs enable you to place and change your orders using the same analytic software. This can be quite handy and useful for day traders, but less important for longer-term traders. Be sure to disable a common feature that shows your equity gains or losses in real time. Watching dollars jump up or down at every tick is stressful and distracting. As the song goes, "…never count your money while you're sitting at the table—there'll be time enough for counting when the dealing's done." Focus on prices and indicators instead of watching dollars and thinking what you can buy with them.

Technical analysis software is constantly changing and evolving; a book is not the right place for software recommendations. My firm Elder.com maintains a brief Software Guide, which we periodically update and e-mail to any trader who asks for it, as a public service.

As mentioned earlier in this book, most programs for technical analysis fall into one of three groups: toolboxes, black boxes, and gray boxes. Toolboxes are for serious traders, black boxes are for people who believe in Santa Claus, and gray boxes are in between. When considering a new software package, be sure to know which group it belongs to.

Black Boxes and Gray Boxes

Black box software is pure magic: it tells you what and when to buy and sell without telling you why. You download the data and push a button. Lights blink, gears click, and a message lights up, telling you what to do. Magic!

Black boxes always come with impressive track records that show profitable past performance. Every black box eventually self-destructs because markets keep changing. Even systems with built-in optimization don't survive because we don't know what kind of optimization will be needed in the future. There is no substitute for human judgment. The only way to make money from a black box is to sell one. Most black boxes are sold by hustlers to gullible or insecure traders.

Each black box is guaranteed to fail, even if sold by an honest developer. Complex human activities, such as trading, cannot be automated. Machines can help but not replace humans.

Trading with a black box means using a slice of someone else's intelligence, as it existed at some point in the past. Markets change, and experts change their minds, but a black box keeps churning out its buy and sell signals. It would have been funny if it wasn't so expensive for losers.

A gray box generates trading signals based on proprietary formulas. Unlike a black box, it discloses its general principles and allows you to adjust its parameters to some degree. The closer a gray box is to a toolbox, the better it is.

Computers

While online programs can run on any computer, most stand-alone programs are written for the Windows environment. Some traders run them on Macs, using emulation software. There are even programs for tablets, such as iPads.

Technical analysis software tends to be not very demanding of processing power, but still, it makes sense to get the most modern machine so that it remains useful for years.

Many day traders like to use multiple screens for a multidimensional view of the markets and the ability to watch several trading vehicles at once. Since I like to travel, I carry a small external screen that helps me monitor markets and trade from the road. It's the size of my laptop but much thinner and attaches to it with a USB cable, without a power cord.

Market Data

Swing and position traders enter and exit trades within days or weeks, while day traders enter and exit within a few hours if not minutes. End-of-day data is sufficient for position traders, but day traders need real-time data.

When you download the daily data for research, it pays to cover two bull-and-bear-market cycles, or about 10 years. Whenever I approach a stock, I like to look back at 12 years of trading history to see whether it is cheap or expensive relative to its 12-year range.

Whenever you approach a trade, you must know your edge—what will help you make money. The ability to recognize patterns is a part of my edge, but if a stock's history is too short, there are no reliable patterns to identify. That's why I avoid trading very young stocks, those with less than a year's history.

When collecting and analyzing data, don't chase too many markets at once. Focus on quality and depth rather than quantity. Begin by following the key market indexes, such as the Dow, the NASDAQ, and the S&P. Many professional traders focus on a relatively small number of stocks. They get to know them well and become familiar with their behavior patterns.

You could start out by focusing on a dozen stocks. Many professionals limit themselves to fewer than 100 stocks, which they review every weekend and mark their opinions in a fresh column of their spreadsheet. They may select fewer than 10 stocks from that pool that look promising for the week ahead and focus on them. Build your watch list gradually from the popular stocks of the year; add a few stocks from the most promising industries and some stocks you've traded before. Building a watch list is like gardening: you can't get a beautiful garden in a single season, but you can get there over several seasons.

Try to stick to the data in your own time zone. When I teach overseas, traders often ask whether I trade in their country. I remind them that whenever you put on a trade, you're trying to take money out of some other trader's pocket, while others are trying to pick yours. This game is hard enough when you're awake, but it is risky to trade in a different time zone, allowing locals to pick your pockets while you sleep. This is why I largely limit my trading to the U.S. markets. Many overseas traders complain that they find their domestic markets too thin and ask whether it would make

sense for them to trade in the huge and liquid U.S. market. The answer depends on how different their time zone is from the U.S. market's time zone. For example, the U.S. markets are easy to trade from Europe where they open at 3:30 p.m. local time and close at 10 p.m. It is much harder to do from Asia or Australia, but it can work if you take a longer view and aim to catch longer-term trends.

Beginning traders should steer clear of day-trading. It demands instant decision making, and if you stop to think, you're dead. Learn to trade in a slower environment. Become a competent position or swing trader before you consider day-trading. If you compare swing trading and day-trading, it is like playing the same video game at level one or level nine. You run the same mazes and dodge the same monsters, but the pace of the game is so fast at level nine that your reactions must be automatic. Learn to analyze markets at level one—become a swing trader before attempting to day-trade. We'll return to this topic in Chapter 33, "Trading Timeframes."

A good place to get started is swing trading, i.e., holding positions for several days. Select popular stocks that have good swings on a good volume. Start out by following just a handful. Some swing traders who hold positions for only a few days use real-time data for timing entries and exits, while others manage quite well with end-of-day data.

Three Major Groups of Indicators

Indicators help identify trends and reversals. They are more objective than chart patterns and provide insight into the balance of power between bulls and bears.

A great challenge is that various indicators may contradict one another. Some of them work best in trending markets, others in flat markets. Some are good at catching turning points, while others are better at riding trends. That's why it pays to select a small number of indicators from various groups and learn to combine them.

Many beginners look for a “silver bullet”—a single magic indicator, but markets are too complex to be handled with a single tool. Others try to poll a multitude of indicators and average their signals. The results of such a “poll” will be heavily skewed by the indicators you select.

Most indicators are based on the same five pieces of data: open, high, low, close, and volume. Prices are primary; indicators are derived from them. Using ten, twenty, or fifty indicators will not deepen your analysis because they share the same base.

We can divide indicators into three groups: trend-following indicators, oscillators, and miscellaneous. Trend-following indicators work best when markets are moving, but the quality of their signals sharply deteriorates when the markets go flat. Oscillators catch turning points in flat markets but give premature and dangerous signals when the markets begin to trend. Miscellaneous indicators provide insights into mass psychology. Before using any indicator, be sure to understand what it measures and how it works. Only then can you have confidence in its signals.

Trend-following indicators include moving averages, MACD Lines (moving average convergence-divergence), the Directional System, On-Balance Volume, Accumulation/Distribution, and others. Trend-following indicators are coincident or lagging indicators—they turn after trends reverse.

Oscillators help identify turning points. They include MACD-Histogram, Force Index, Stochastic, Rate of Change, Momentum, the Relative Strength Index, Elder-ray, Williams %R, and others. Oscillators are leading or coincident indicators that often turn ahead of prices.

Miscellaneous indicators provide insights into the intensity of bullish or bearish camps. They include the New High–New Low Index, the Put-Call Ratio, Bullish Consensus, Commitments of Traders, and others. They can be leading or coincident indicators.

It pays to combine several indicators from different groups so that their negative features cancel each other out, while their positive features remain undisturbed. This is the aim of the Triple Screen trading system (see Chapter 39).

As we begin to explore indicators, a few words of caution. Sometimes their signals are very clear, while at other times they are quite vague. I've learned long ago to enter trades only when indicator signals “grab me by the face.” If I find myself squinting at a chart while trying to understand its signals, I flip the page and move to the next stock.

If you look at a familiar indicator but can't understand its message, it is most likely because the stock you're trying to analyze is in a chaotic stage (see Chapter 17). If indicator signals aren't clear, don't start massaging them or piling on more indicators, but simply leave that stock alone for the time being and look for another one. One of the great luxuries of private traders is that no one pushes us to trade—we can wait for the best and clearest signals.

As you read about the signals of different indicators, remember that you cannot base trading decisions on a single indicator. We need to select several indicators we understand and trust and combine them into a trading system. In the following chapters, we'll be exploring indicators, while later in the book we'll see how to build your own system from them.

22. Moving Averages

Wall Street old-timers say that moving averages were brought to the financial markets after World War II. Antiaircraft gunners used moving averages to site guns on enemy planes and after the war, applied this method to moving prices. The two early experts on moving averages were Richard Donchian and J. M. Hurst—neither apparently a gunner. Donchian was a Merrill Lynch employee who developed trading methods based on moving average crossovers. Hurst was an engineer who applied moving averages to stocks in his classic book, *The Profit Magic of Stock Transaction Timing*.

A moving average (MA) reflects the average value of data in its time window. A 5-day MA shows the average price for the past 5 days, a 20-day MA for the past 20 days, and so on. Connecting each day's MA value gives you a moving average line.

$$\text{Simple MA} = \frac{P_1 + P_2 + \ldots + P_N}{N}$$

where

- P is the price being averaged
- N is the number of days in the moving average (selected by the trader)

The level of a moving average reflects values that are being averaged and depends on the width of the MA window. Suppose you want to calculate a 3-day simple moving average of a stock. If it closes at 19, 21, and 20 on three consecutive days, then a 3-day simple MA of closing prices is 20 (19 + 21 + 20, divided by 3). Suppose that on the fourth day the stock closes at 22. It makes its 3-day MA rise to 21—the average of the last three days (21 + 20 + 22), divided by 3.

There are three main types of moving averages: simple, exponential, and weighted. Simple MAs used to be popular because they were easy to calculate in precomputer days, and both Donchian and Hurst used them. Simple MAs, however, have a fatal flaw—they change twice in response to each price.

Twice as Much Bark

First, a simple MA changes when a new piece of data comes in. That's good—we want our MA to reflect the latest prices. The bad thing is that MA changes again when an old price is dropped off at the end of its window. When a high price is dropped, a simple MA ticks down. When a low price is dropped, a simple MA rises. Those changes have nothing to do with the current reality of the market.

Imagine that a stock hovers between 80 and 90, and its 10-day simple MA stands at 85 but includes one day when the stock reached 105. When that high number is dropped at the end of the 10-day window, the MA will dive, as if in a downtrend. That meaningless dive has nothing to do with the current trend.

When an old piece of data gets dropped off, a simple moving average jumps. This problem is worse with short MAs but not so bad with long MAs. If you use a 10-day MA, those drop-offs can really shake it because each day constitutes 10% of the total value. On the other hand, if you use a 200-day MA, where each day is responsible for only 0.5%, dropping off a day isn't going to influence it a lot.

Still, a simple MA is like a guard dog that barks twice—once when someone approaches the house, and once again when someone walks away from it. After a while, you don't know when to believe that dog. This is why a modern computerized trader is better off using exponential moving averages, which we'll discuss later in this chapter.

Market Psychology

Each price is a snapshot of the current consensus of value among all market participants (see Chapter 11). Still, a single price doesn't tell you whether the crowd is becoming more bullish or bearish, just as you can't tell from a single photo whether a person is an optimist or a pessimist. If, on the other hand, you take a daily photo of a person for ten days, bring them to a lab, and order a composite picture, it'll reveal that person's typical features. You can monitor trends in that person's mood by updating that composite photo each day.

A moving average is a composite photograph of the market—it combines prices for several days. The market consists of huge crowds, and the MA slope identifies the direction of mass inertia. **A moving average represents an average consensus of value for the period of time in its window.**

The most important message of a moving average is the direction of its slope. When it rises, it shows that the crowd is becoming more optimistic—bullish. When it falls, it shows that the crowd is becoming more pessimistic—bearish. When prices rise above a moving average, the crowd is more bullish than before. When prices fall below a moving average, the crowd is more bearish than before.

Exponential Moving Averages

An exponential moving average (EMA) is a better trend-following tool because it gives greater weight to the latest data and responds to changes faster than a simple MA. At the same time, an EMA doesn't jump in response to dropping old data. This guard dog has better ears, and it barks only when someone approaches the house.

$$\text{EMA} = P_{\text{tod}} \bullet K + \text{EMA}_{\text{yest}} \bullet (1 - K)$$

where

$$K = \frac{2}{N + 1}$$

N = the number of days in the EMA (chosen by the trader).

P_{tod} = today's price.

EMA_{yest} = the EMA of yesterday.

Technical analysis software allows you to select EMA length. An EMA has two major advantages over a simple MA. First, it assigns greater weight to the last trading day. The latest mood of the crowd is more important. In a 10-day EMA, the last closing price is responsible for 18 percent of EMA value, while in a simple MA all days are equal. Second, EMA does not drop old data the way a simple MA does. Old data slowly fades away, like a mood of the past lingering in a composite photo.

Choosing the Length of a Moving Average

It pays to monitor your EMA slope because a rising line reflects bullishness and a declining one bearishness. A relatively narrow window makes an EMA more sensitive to price changes. It catches new trends sooner, but leads to more whipsaws. A whipsaw is a rapid reversal of a trading signal.

An EMA with a wider time window produces fewer whipsaws but misses turning points by a wider margin.

You can take several approaches to deciding how long to make your moving average or any other indicator. It would be nice to tie EMA length to a price cycle if you can find it. A moving average should be half the length of the dominant market cycle. If you find a 22-day cycle, use an 11-day moving average. If the cycle is 34 days long, then use a 17-day moving average. Trouble is, cycles keep changing and disappearing.

There is no single magic “best” number for the EMA window. Good indicators are robust—not too sensitive to small changes in their parameters. When trying to catch longer trends, use a longer moving average. You need a bigger fishing rod to catch a bigger fish. A 200-day moving average works for long-term stock investors who want to ride major trends.

Most traders can use an EMA between 10 and 30 days. A moving average should not be shorter than 8 days to avoid defeating its purpose as a trend-following tool. Among the numbers I like are 22 because there are approximately 22 trading days in a month and 26—half of the number of trading weeks in a year.

Creating individualized parameters for every trading vehicle is practical only if you track a tiny handful of stocks or futures. Once their number reaches double digits, individualized parameters create confusion. It is better to have a yardstick that's one yard long and use the same parameters for all your moving averages in the same timeframe.

Don't change indicator parameters while looking for trades. Fiddling with parameters to obtain signals you'd like to see robs your indicators of their most valuable feature—their objectivity. It is better to set your parameters and live with them.

Trading Rules

Beginning traders try to forecast the future. Professionals don't forecast; they measure the relative power of bulls and bears, monitor the trend, and manage their positions.

Moving averages help us trade in the direction of the trend. The single most important message of a moving average comes from the direction of its slope (Figure 22.1). It reflects the market's inertia. When an EMA rises, it is best

to trade the market from the long side, and when it falls, it pays to trade from the short side.

1. When an EMA rises, trade that market from the long side. Buy when prices dip near the moving average. Once you are long, place a protective stop below the latest minor low, and move it to the break-even point as soon as prices close higher.
2. When the EMA falls, trade that market from the short side. Sell short when prices rally toward the EMA and place a protective stop above the latest minor high. Lower your stop to breakeven as prices drop.
3. When the EMA goes flat and only wiggles a little, it identifies an aimless, trendless market. Do not trade using a trend-following method.

Figure 22.1 DIS daily 22-day EMA. *(Chart by Stockcharts.com)*

An Exponential Moving Average (EMA).

The direction of the slope of a moving average helps identify trends of trading vehicles, such as the Walt Disney Company (DIS).

Old traders used to follow fast and slow MA crossovers. The favorite approach of Donchian, one of the originators of trading with moving averages, was to use crossovers of 4-, 9-, and 18-day MAs. Trading signals

were given when all three MAs turned in the same direction. His method, like other mechanical trading methods, only worked during strongly trending markets.

Trying to filter out whipsaws with mechanical rules is self-defeating—filters reduce profits as much as losses. An example of a filter is a rule that requires prices to close on the other side of MA not once, but twice, or to penetrate MA by a certain margin. Mechanical filters reduce losses, but they also diminish the best feature of a moving average—its ability to lock onto a trend at an early stage.

A trader must accept that an EMA, like any other trading tool, has good and bad sides. Moving averages help you identify and follow trends, but they lead to whipsaws in trading ranges. We will look for an answer to this dilemma in the chapter on the Triple Screen trading system.

More on Moving Averages

Moving averages often serve as **support and resistance**. A rising MA tends to serve as a floor below prices, and a falling MA serves as a ceiling above them. That's why it pays to buy near a rising MA, and sell short near a falling MA.

Moving averages can be applied to **indicators** as well as prices. For example, some traders use a 5-day moving average of volume. When volume falls below its 5-day MA, it shows reduced public interest in the minor trend and indicates that it is likely to reverse. When volume overshoots its MA, it shows strong public interest and confirms the price trend. We'll be using moving averages of an indicator when we work with Force Index (Chapter 30)

The proper way to plot a simple moving average is to **lag** it behind prices by half its length. For example, a 10-day simple MA properly belongs in the middle of a 10-day period and it should be plotted underneath the 5th or 6th day. An exponential moving average is more heavily weighted toward the latest data, and a 10-day EMA should be lagged by two or three days. Most software packages allow you to lag a moving average.

Moving averages can be based not only on closing prices but also on the **mean between the high and the low**, which can be useful for day traders.

An exponential moving average assigns greater weight to the latest day of trading, but a **weighted moving average** (WMA) allows you to assign any weight to any day, depending on what you deem important. WMAs are so complicated that traders are better off using EMAs.

Dual EMAs

Whenever I analyze charts, I like to use not one but two exponential moving averages. The longer EMA shows a longer-term consensus of value. The shorter-term EMA shows a shorter-term consensus of value.

I keep the ratio between them at approximately two to one. For example, I may use a 26-week and a 13-week EMA on a weekly chart, or a 22-day and an 11-day EMA on a daily chart. Please understand there is no magic set of numbers. You should feel free to play with these values, selecting a set that will be unique to you. Just keep in mind to keep the difference between the two EMAs near 2:1. It might be simpler and more efficient to use the same set of values (for example 26/13 or 22/11) in all timeframes: weekly, daily, and even intraday.

Since the shorter EMA represents the short-term consensus of value and the longer-term EMA the long-term consensus, I believe that value "lives" between these two lines. **I call the space between the two EMAs the value zone.**

Moving Averages and Channels

A channel consists of two lines drawn parallel to a moving average. Oddly enough, the distance between the upper and the lower channel lines is sometimes described as "height" and at other times as "width" of the channel, even though both refer to the same measurement.

A well-drawn channel should contain approximately 95% of all prices that occurred during the past 100 bars. Longer-term markets have wider channels because prices can cover greater distances in 100 weeks than in 100 days. Volatile markets have wider (or taller) channels than quiet, sleepy markets.

Channels are very useful for trading and performance tracking. We'll review the first in Chapter 41 (Channel Trading Systems) and the second in Chapter 59 (Trade Journal—Measuring Your Performance.)

Prices, Values, and the Value Zone

One of the key concepts in market analysis—the concept that all of us intuitively understand but almost never spell out—is that prices are different from values. We buy stocks when we feel that their current prices are below their true value and expect prices to rise. We sell and sell short when we think that stocks are priced above their real value and are likely to come down.

We buy undervalued stocks and sell overvalued shares—but how to define value?

Fundamental analysts do it by studying balance sheets and annual reports, but those sources aren't nearly as objective as they seem. Companies often massage their financial data. Fundamental analysts don't have a monopoly on the concept of value. Technical analysts can define values by tracking the spread between a fast and a slow EMA. One of these EMAs reflects a short-term and the other a long-term consensus of value. *Value lives in the zone between the two moving averages* (Figure 22.2).

Figure 22.2 DIS daily, 26- and 13-day EMAs. *(Chart by Stockcharts.com)*

EMAs and the Value Zone

A short-term MA identifies a short-term consensus of value, while a long-term MA reflects a long-term consensus of value. Value “lives” in the zone

between the two moving averages. Select the parameters for this pair so that the long-term average is approximately twice the length of the short-term EMA. Looking at a chart, you can immediately tell which EMA is longer or shorter—the fast one hugs prices more closely, while the slow one moves more slowly. The slow EMA helps identify the trend, while the fast MA sets the boundary of the value zone.

When looking to buy a stock, it pays to do it in the value zone, rather than overpay and buy above value. Similarly, when shorting, it pays to wait for a rally into the value zone to establish a short position rather than sell short when prices collapse.

During the uptrend shown on this chart, you can see pullbacks to value, offering attractive buying opportunities in areas marked 1, 2, 3, and 4. The downward reversal of the slow EMA marks the end of the uptrend. At the right edge of the chart, the trend is down, while a pullback to value in area 5 offers a shorting opportunity.

Very important: it's impossible to trade successfully with just a single indicator or even a pair of moving averages. Markets are too complex to extract money from them with a single tool. We need to build a trading system using several indicators as well as analyze markets in more than one timeframe. Keep this in mind as we review various indicators—they are the building blocks of trading systems, which we'll review later in the book.

Keeping this in mind will help you become a more rational trader. Once you know how to define value, you can aim to buy at or below value and sell above value. We'll return to look for trading opportunities in overvalued and undervalued markets when we examine price channels or envelopes in Chapter 41 on the Channel Trading System.

23. Moving Average Convergence-Divergence: MACD Lines and MACD-Histogram

Moving averages help identify trends and their reversals. A more advanced indicator was constructed by Gerald Appel, an analyst and money manager in New York. Moving Average Convergence-Divergence, or MACD for short, consists of not one, but three exponential moving averages. It appears on the charts as two lines whose crossovers give trading signals.

How to Create MACD

The original MACD indicator consists of two lines: a solid line (called the MACD line) and a dashed line (called the Signal line). The MACD line is made up of two exponential moving averages (EMAs). It responds to changes in prices relatively quickly. The Signal line smooths the MACD line with another EMA. It responds to changes in prices more slowly. In Appel's original system, buy and sell signals were given when the fast MACD line crossed above or below the slow Signal line.

The MACD indicator is included in most programs for technical analysis. To create MACD by hand:

1. Calculate a 12-day EMA of closing prices.
2. Calculate a 26-day EMA of closing prices.
3. Subtract the 26-day EMA from the 12-day EMA, and plot their difference as a solid line. This is the fast MACD line.
4. Calculate a 9-day EMA of the fast line, and plot the result as a dashed line. This is the slow Signal line.

Market Psychology

Each price reflects the consensus of value among the mass of market participants at the moment of the trade. A moving average represents an average consensus of value for a selected period of time—it is a composite photo of mass consensus. A longer moving average tracks longer-term consensus, and a shorter moving average tracks shorter-term consensus.

Crossovers of the MACD and Signal lines identify shifts in the balance of power of bulls and bears. The fast MACD line reflects mass consensus over a shorter time period. The slow Signal line reflects mass consensus over a longer period. When the fast MACD line rises above the slow Signal line, it shows that bulls dominate the market, and it is better to trade from the long side. When the fast line falls below the slow line, it shows that bears dominate the market and it pays to trade from the short side.

Trading Rules for MACD Lines

Crossovers of the MACD and Signal lines identify changes of market tides. Trading in the direction of a crossover means going with the flow of the market. This system generates fewer trades and whipsaws than mechanical systems based on a single moving average.

1. When the fast MACD line crosses above the slow Signal line, it gives a buy signal. Go long, and place a protective stop below the latest minor low.
2. When the fast line crosses below the slow line, it gives a sell signal. Go short, and place a protective stop above the latest minor high (Figure 23.1).

Figure 23.1 ABX weekly, 26- and 13-week EMAs, 12-26-9 MACD Lines. (*Chart by Stockcharts.com*)

MACD Lines

Barrick Gold Corporation (ABX), which has the largest market capitalization of all U.S. listed gold companies, was dragged down in 2012 and 2013 by the bear market in gold. Notice the sell signal, marked by a red vertical arrow, when the fast line crossed below the slow line. That signal reversed more than a year later, when the fast line crossed above the slow line, marked with a green vertical arrow.

Notice several additional patterns on this chart. When ABX fell to a record low, marked B, MACD Lines refused to confirm: they didn't fall to a new low but traced out a double bottom. That new low B turned out to be a false downside breakout, a bullish sign. Bears' last attempt to drive ABX lower, in area C, wasn't confirmed by MACD Lines, which maintained a steady uptrend. At the right edge of the chart, MACD Lines have reached a new high for the upmove, indicating strength. Both EMAs are rising, confirming the bullish trend.

Bottoms A, B, and C of ABX could be seen as an inverted head-and-shoulders bottom. Still, our technical indicators deliver much more objective messages than classical chart patterns.

More on MACD Lines

Sophisticated traders tend to personalize their MACD Lines by using other moving averages than the standard 12-, 26-, and 9-bar EMAs. Beware of optimizing MACD too often. If you fiddle with MACD long enough, you can make it give you any signal you'd like.

A "q**uick-and-dirty**" way to plot MACD can be used by traders whose software doesn't include this indicator. Some packages allow you to draw only two EMAs. In that case, you can use crossovers between two EMAs, such as 12-day and 26-day EMAs as a proxy for MACD and Signal lines.

MACD-Histogram

MACD-Histogram offers a deeper insight into the balance of power between bulls and bears than the original MACD Lines. It shows not only whether bulls or bears are in control but also whether they are growing stronger or weaker. It is one of the best tools available to market technicians.

$$\text{MACD-Histogram} = \text{MACD line} - \text{Signal line}$$

MACD-Histogram measures the difference between the MACD line and the Signal line. It plots that difference as a histogram—a series of vertical bars. That distance may appear puny, but a computer rescales it to fill the screen (Figure 23.2).

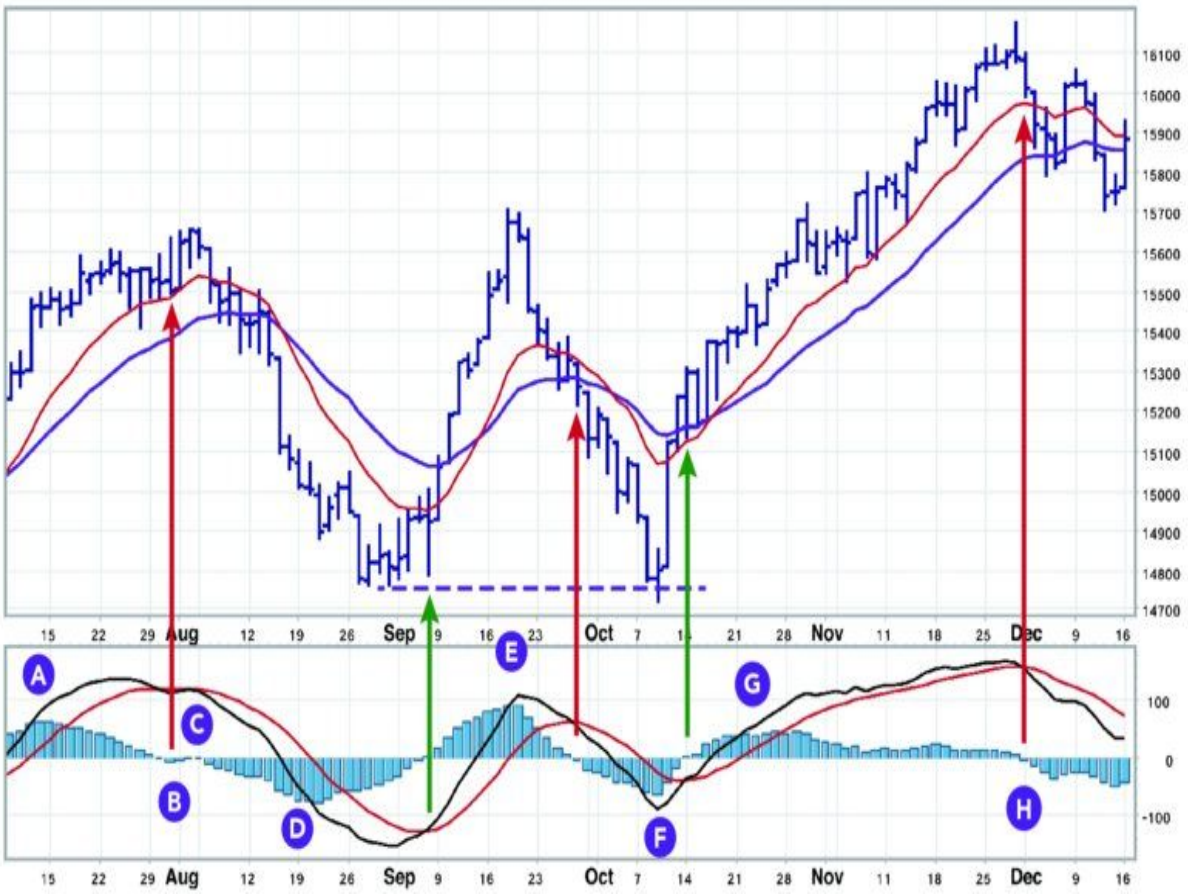


Figure 23.2 DJIA daily, 26- and 13-day EMAs, 12-26-9 MACD Lines. (*Chart by Stockcharts.com*)

MACD-Histogram

When MACD Lines cross over, MACD-Histogram, which is derived from them, crosses above or below its zero line. You can see buy and sell signals of MACD lines, marked by green and red arrows. These signals are often delayed, but MACD-Histogram gives its own fine signals. We'll return to them later in this chapter, but at this point let's look at just one.

Compare the Dow bottoms D and F. The second bottom was slightly lower (it turned out to be a false downside breakout), but the corresponding bottom of MACD-Histogram was more shallow than the first, warning that bears were weaker than before and an upside reversal was likely to occur.

If the fast line is above the slow line, MACD-Histogram is positive and plotted above the zero line. If the fast line is below the slow line, MACD-Histogram is negative and plotted below the zero line. When the two lines touch, MACD-Histogram equals zero.

When the spread between the MACD and Signal lines increases, MACD-Histogram becomes taller or deeper, depending on its direction. When the two lines draw closer, MACD-Histogram becomes shorter.

The slope of MACD-Histogram is defined by the relationship between any two neighboring bars. If the last bar is higher (like the height of letters m–M), the slope of MACD-Histogram is up. If the last bar is lower (like the depth of letters P–p), then the slope of MACD-Histogram is down.

Market Psychology

MACD-Histogram reveals the difference between long-term and short-term consensus of value. The fast MACD line reflects market consensus over a shorter period. The slow Signal line reflects market consensus over a longer period. MACD-Histogram tracks the difference between them.

The slope of MACD-Histogram identifies the dominant market group. A rising MACD-Histogram shows that bulls are becoming stronger. A falling MACD-Histogram shows that bears are becoming stronger.

When the fast MACD line rallies ahead of the slow Signal line, MACD-Histogram rises. It shows that bulls are becoming stronger than they have been—it is a good time to trade from the long side. When the fast MACD line drops faster than the slow line, MACD-Histogram falls. It shows that bears are becoming stronger—it's a good time to trade from the short side.

When the slope of MACD-Histogram moves in the same direction as prices, the trend is safe. When the slope of MACD-Histogram moves in a direction opposite to that of prices, the health of the trend is in question.

The slope of MACD-Histogram is more important than its position above or below the centerline. It is best to trade in the direction of the slope of MACD-Histogram because it shows whether bulls or bears dominate the market. The best buy signals occur when MACD-Histogram is below its centerline but its slope turns up, showing that bears have become exhausted. The best sell signals are given when MACD-Histogram is above its centerline but its slope turns down, showing that bulls have become exhausted.

Trading Rules

MACD-Histogram gives two types of trading signals. One is common, occurring at every price bar. The other is rare but extremely strong. It may occur only a few times a year on the daily chart of a stock. It's even more rare on the weekly charts, but more frequent on the intraday charts.

The common signal is given by the slope of MACD-Histogram. When the current bar is higher than the preceding bar, the slope is up. It shows that bulls are in control and it's time to buy. When the current bar is lower than the preceding bar, the slope is down. It shows that bears are in control and it's time to be short. When prices go one way but MACD-Histogram moves the other way, it shows that the dominant crowd is losing its enthusiasm and the trend is weaker than it appears.

1. Buy when MACD-Histogram stops falling and ticks up. Place a protective stop below the latest minor low.
2. Sell short when MACD-Histogram stops rising and ticks down. Place a protective stop above the latest minor high.

MACD-Histogram ticks up and down on the daily charts so often that it's not practical to buy and sell every time it turns. The changes of slope of MACD-Histograms are much more meaningful on the weekly charts, which is why it is included in the Triple Screen trading system (see Chapter 39). A combination of an exponential moving average and MACD-Histogram helps create the Impulse system, described in Chapter 40.

When to Expect a New Peak or Valley

A record peak for the past three months of daily MACD-Histogram shows that bulls are very strong and prices are likely to rise even higher. A record new low for MACD-Histogram for the past three months shows that bears are very strong and lower prices are likely ahead.

When MACD-Histogram reaches a new high during a rally, the uptrend is healthy and you can expect the next rally to retest or exceed its previous peak. If MACD-Histogram falls to a new low during a downtrend, it shows that bears are strong and prices are likely to retest or exceed their latest low.

MACD-Histogram works like headlights on a car—it gives you a glimpse of the road ahead. Not all the way home, mind you, but enough to drive safely at a reasonable speed.

More on MACD-Histogram

MACD-Histogram works in all timeframes: weekly, daily, and intraday. Signals in longer timeframes lead to greater price moves. For example, the signals of weekly MACD-Histogram lead to greater price changes than the daily or intraday MACD. This principle applies to all technical indicators.

When you use MACD Lines and MACD-Histogram on the weekly charts, you don't have to wait until Friday to find your signals. A trend can turn in the middle of the week—the market does not watch the calendar. It makes sense to perform weekly studies each day. I set my software to plot weekly charts in the traditional manner, from Monday through Friday, but with a twist: the latest weekly bar reflects trading for the current week, starting on Monday. After the market closes on Monday, my latest 'weekly bar' is identical to Monday's daily bar. The weekly bar on Tuesday reflects two trading days, and so on. Because of this, on Monday I take the new weekly bar at a heavy discount, but by Thursday I start trusting it a great deal more.

Divergences

Divergences are among the most powerful signals in technical analysis. In this subchapter, we'll focus on MACD-Histogram, but this concept applies to most indicators.

Divergences between MACD-Histogram and prices are infrequent, but they give some of the most powerful signals. They often mark major turning points. They don't occur at every important top or bottom, but when you see one, you know that a big reversal is probably at hand.

Bullish divergences occur towards the ends of downtrends—they identify market bottoms. A classical bullish divergence occurs when prices and the oscillator both fall to a new low, rally, with the oscillator rising above its zero line, then both fall again. This time, prices drop to a lower low, but an oscillator traces a higher bottom than during its previous decline. Such bullish divergences often precede sharp rallies (Figure 23.3).

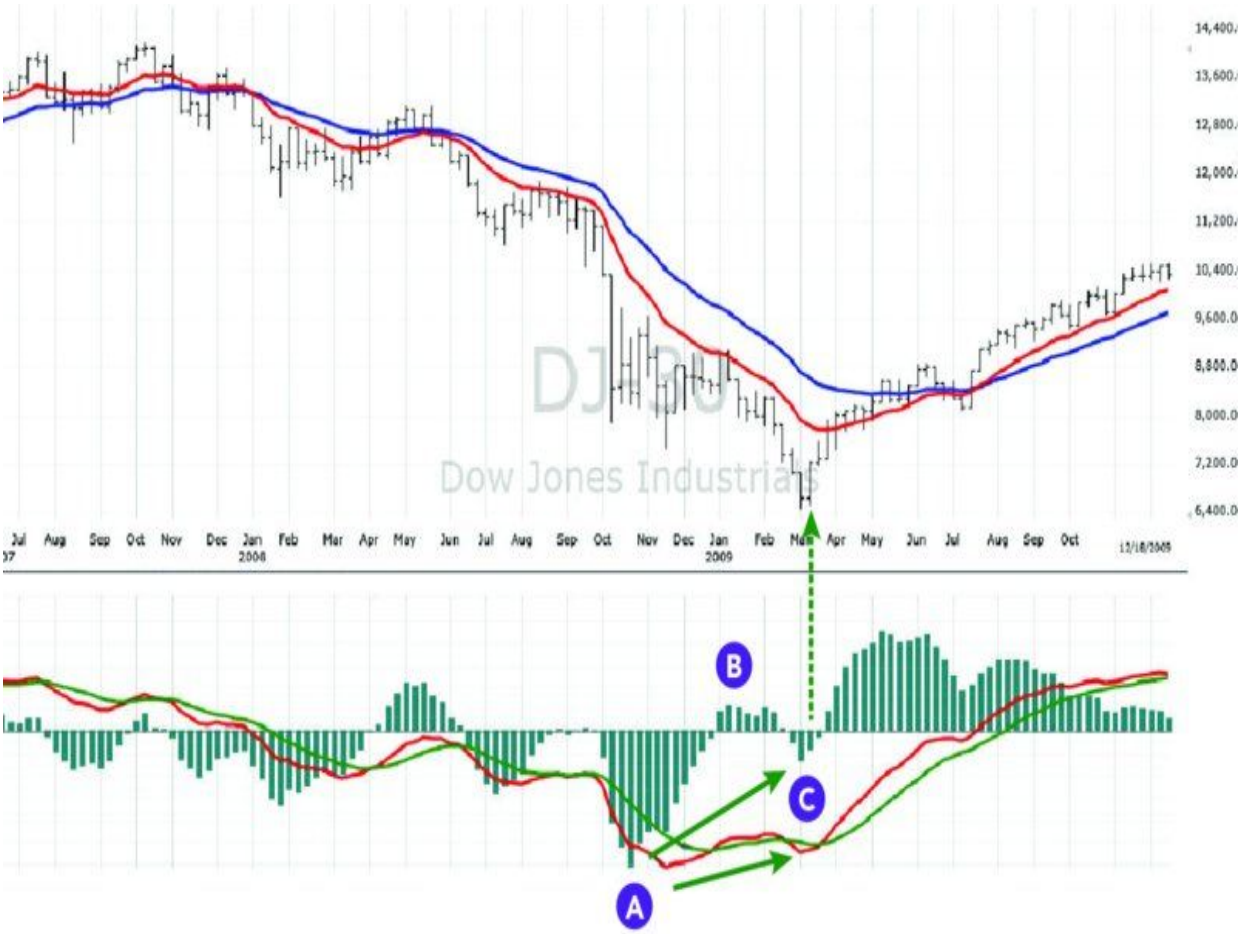


Figure 23.3 DJIA weekly, 26- and 13-day EMAs, 12-26-9 MACD Lines and MACD-Histogram. *(Chart by TC2000 from the book* Two Roads Diverged: Trading Divergences)

A Bullish Divergence

Here you see a divergence that signaled the 2007–2009 bear market bottom, giving a strong buy signal right near the lows. In area A, the Dow appeared in a free fall, as Lehman Brothers went bust and waves of selling hit the market. The record low A of MACD-H indicated that bears were extremely strong and that the price bottom A was likely to be retested or exceeded. In area B, MACD-H rallied above its centerline, “breaking the back of the bear.” Notice that the brief rally reached the “value zone” between the two moving averages. This is a fairly common target for bear market rallies. In area C, the Dow slid to a new bear market low, but MACD-H traced a much more shallow low. Its uptick completed a bullish divergence, giving a strong buy signal.

I'm showing you this weekly chart of DJIA and its MACD-Histogram as a perfect example of a divergence. It deserves to be pinned to a wall near your trading desk. You won't always get such a perfect picture, but the closer you get to it, the more reliable it'll be.

Notice that the **breaking of the centerline** between two indicator bottoms is an absolute must for a true divergence. MACD-Histogram has to cross above that line before skidding to its second bottom. If there is no crossover, there is no divergence.

Another key point: MACD-H gives a **buy signal when it ticks up from the second bottom**. It does not have to cross above the centerline for the second time. The buy signal occurs when MACD-H, still below zero, simply stops declining and traces out a bar that is less negative than its preceding bar.

This divergence of MACD-Histogram in Figure 23.3 was reinforced when MACD Lines traced a bullish pattern between the bottoms A and C, with the second bottom more shallow than the first. Such patterns of MACD Lines are quite rare. They indicate that the coming uptrend is likely to be especially strong, even though we cannot call them divergences because this indicator has no zero line. The rally that began in 2009 lasted almost a year before its first meaningful correction.

Also, we can't call the pattern of lower indicator tops after the bottom C a divergence. The lower tops reflect a gradual weakening of the uptrend with the passage of time. In order to count as a divergence, MACD-Histogram has to cross and recross its zero line.

Bearish divergences occur in uptrends—they identify market tops. A classical bearish divergence occurs when prices reach a new high and then pull back, with an oscillator dropping below its zero line. Prices stabilize and rally to a higher high, but an oscillator reaches a lower peak than it did on a previous rally. Such bearish divergences usually lead to sharp breaks.

A bearish divergence shows that bulls are running out of steam, prices are rising out of inertia, and bears are ready to take control. Valid divergences are clearly visible—they seem to jump at you from the charts. If you need a ruler to tell whether there is a divergence, assume there is none (Figure 23.4).

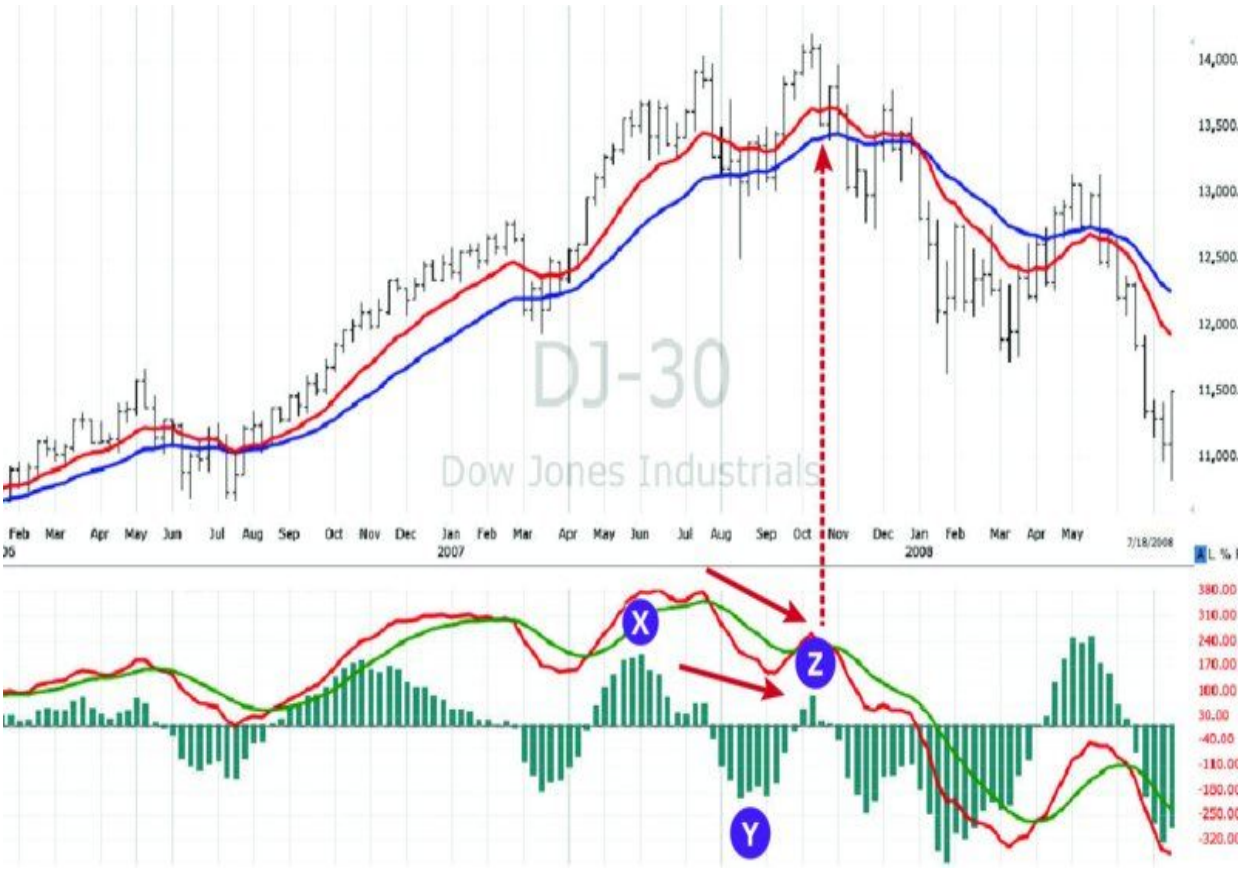


Figure 23.4 DJIA weekly, 26- and 13-day EMAs, 12-26-9 MACD Lines and MACD-Histogram. (*Chart by TC2000 from the book* Two Roads Diverged: Trading Divergences)

A Bearish Divergence

In area X, the Dow rallied to a new bull market high and MACD-Histogram rallied with it, rising above its previous peak and showing that bulls were extremely strong. This indicated that the price peak X was likely to be retested or exceeded. Note that the top X of MACDH, despite its complex form, was not a divergence because the valley in its middle never sank below zero.

In area Y, MACD-H fell below its centerline, “breaking the back of the bull.” Notice that prices punched below the value zone between the two moving averages. This is a fairly common target for bull market breaks. Notice also a kangaroo tail at the bottom Y. In area Z, the Dow rallied to a new bull market high, but the rally of MACD-H was feeble, reflecting the bulls' weakness. Its downtick from peak Z completed a bearish divergence, giving a strong sell signal and auguring in the nastiest bear market in a generation.

The previous chart featured a striking bullish divergence at the 2009 stock market bottom. Now, for a similarly striking illustration of a massive bearish divergence, let's roll back the clock and examine the 2007 bull market top.

Notice that the **breaking of the centerline** between the two indicator tops is an absolute must for a true divergence. MACD-Histogram has to drop below its zero line before rising to the second top.

Another key point: MACD-H gives a **sell signal when it ticks down from the second top**. We don't need to wait for it to cross below the centerline again. The sell signal occurs when MACD-H, still above zero, simply stops rising and traces out a bar shorter than the preceding bar.

The message of a bearish divergence in Figure 23.4 was reinforced by MACD Lines, which traced a bearish pattern between the tops X and Z. The second top of MACD Lines was more shallow than the first, confirming the bearish divergence of MACD-H. Such patterns of MACD Lines tell us that the coming downtrend is likely to be especially severe.

“Missing right shoulder” divergences in which the second peak fails to cross the zero line are quite rare, but produce very strong trading signals. An experienced trader can look for them, but they are definitely not for beginners. They are described and illustrated in the e-book *Two Roads Diverged: Trading Divergence*s.

Kerry Lovvorn performed extensive research to find that the most tradable divergences occur when the distance between the two peaks or the two bottoms of MACD-H is between 20 and 40 bars—and the closer to 20, the better. In other words, the two tops or two bottoms cannot be too far apart. 20 bars translate into 20 weeks on a weekly chart, 20 days on a daily chart, and so on. Kerry also found that the best signals come from divergences in which the second top or bottom is no more than half the height or the depth of the first.

Triple Bullish or Bearish Divergences consist of three price bottoms and three oscillator bottoms or three price tops and three oscillator tops. They are even stronger than regular divergences. In order for a triple divergence to occur, a regular bullish or bearish divergence first has to abort. That's another good reason to practice tight money management! If you lose only a little on a whipsaw, you will preserve both the money and psychological

strength to re-enter a trade. The third top or bottom has to be more shallow than the first but not necessarily the second.

The Hound of the Baskervilles

This signal occurs when a reliable chart or indicator pattern doesn't lead to the action you expected and prices move in the opposite direction. A divergence may indicate that an uptrend is over, but if prices continue to rise, they give the Hound of the Baskervilles signal.

This signal is named after the story by Sir Arthur Conan Doyle in which Sherlock Holmes was called to investigate a murder at a country estate. He found the essential clue when he realized that the family dog didn't bark while the murder was being committed. That meant the dog knew the criminal and the murder was an inside job. The *signal was given by the lack of expected action*—by the lack of barking!

When the market refuses to bark in response to a perfectly good signal, it gives you the Hound of the Baskervilles signal. This shows that something is fundamentally changing below the surface. Then it is time to get in gear with the new powerful trend.

I am not a fan of "stop-and-reverse" orders, but make an exception for the Hound of the Baskervilles. On those rare occasions when a bearish divergence aborts, I may go long. In the rare instances when a bullish divergence aborts, I look to go short.

24. The Directional System

The Directional system is a trend-following method developed by J. Welles Wilder, Jr., in the mid-1970s and modified by several analysts. It identifies trends and shows when a trend is moving fast enough to make it worth following. It helps traders to profit by taking chunks out of the middle of important trends.

How to Construct the Directional System

Directional Movement is defined as the portion of today's range that is outside of the previous day's range. The Directional system checks whether today's range extends above or below the previous day's range and averages that data over a period of time. These complex calculations are best performed on a computer. The Directional system is included in most programs for technical analysis.

1. Identify "**Directional Movement**" (DM) by comparing today's high-low range with yesterday's high-low range. Directional Movement is the largest part of today's range outside of yesterday's range. There are four types of DM (Figure 24.1). DM is always a positive number (+DM and −DM refer simply to movement above or below yesterday's range).
2. Identify the "**True Range**" (TR) of the market you analyze. TR is always a positive number, the largest of the following three:
    1. The distance from today's high to today's low
    2. The distance from today's high to yesterday's close
    3. The distance from today's low to yesterday's close
3. Calculate daily **Directional Indicators** (+DI and −DI). They allow you to compare different markets by expressing their directional movement as a percentage of each market's true range. Each DI is a positive number: +DI equals zero on a day with no directional movement up; −DI equals zero on a day with no directional movement down.

$$+\mathrm{DI} = \frac{+\mathrm{DM}}{\mathrm{TR}} \qquad -\mathrm{DI} = \frac{-\mathrm{DM}}{\mathrm{TR}}$$

4. Calculate **smoothed Directional Lines** ($+DI_{13}$ and $-DI_{13}$). Smooth +DI and −DI are created with moving averages. Most software packages allow you to pick any period for smoothing, such as a 13-day moving average. You get two indicator lines: smoothed Positive and Negative Directional lines, $+DI_{13}$ and $-DI_{13}$. Both numbers are positive. They are usually plotted in different colors.
   The relationship between Positive and Negative lines identifies trends. When $+DI_{13}$ is on top, it shows that the trend is up, and when $-DI_{13}$ is on top, it shows that the trend is down. The crossovers of $+DI_{13}$ and $-DI_{13}$ give buy and sell signals.

5. Calculate the **Average Directional Indicator** (ADX). This unique component of the Directional system shows when a trend is worth following. ADX measures the spread between Directional Lines $+DI_{13}$ and $-DI_{13}$. It is calculated in two steps:
   1. Calculate the daily **Directional Indicator** DX:

$$DX = \frac{+DI_{13} - -DI_{13}}{+DI_{13} + -DI_{13}} \cdot 100$$

   For example, if $+DI_{13} = 34$ and $-DI_{13} = 18$, then,

$$DX = \frac{34 - 18}{34 + 18} \cdot 100 = 30.77, \text{ rounded off to } 31$$

   2. Calculate the Average Directional Indicator ADX by smoothing DX with a moving average, such as a 13-day EMA.

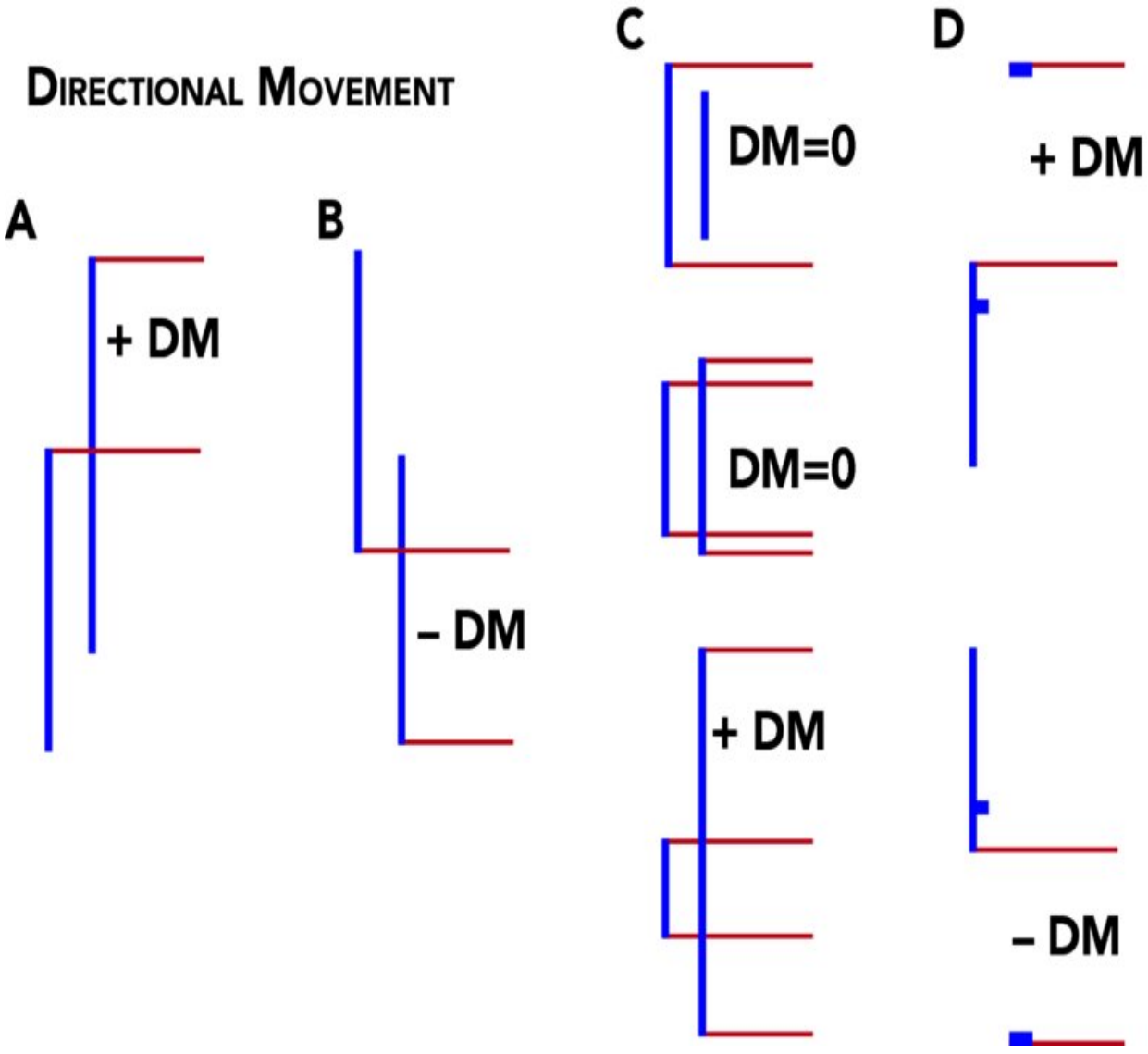


Figure 24.1 Directional Movement.

Directional movement is the largest part of today's range that is outside of yesterday's range.

1. If today's range extends above yesterday's range, Directional Movement is positive (+DM).
2. If today's range extends below yesterday's range, Directional Movement is negative (−DM).
3. If today's range is inside of yesterday's range or extends above and below it by equal amounts, there is no Directional Movement (DM = 0). If today's range extends both above and below yesterday's range,

DM is positive or negative, pending on which part of the “outside range” is larger.

4. On a limit-up day, +DM equals the distance from today's close to yesterday's high. On a limit-down day, −DM equals the distance from today's close to yesterday's low.

During a persistent trend, the spread between two smoothed Directional lines increases, and ADX rises. ADX declines when a trend reverses or when a market enters a trading range. It pays to use trend-following methods only when ADX is rising.

Crowd Behavior

The Directional system tracks changes in mass bullishness and bearishness by measuring the capacity of bulls and bears to move prices outside of the previous day's range. If today's high is above yesterday's high, it shows that the market crowd is more bullish. If today's low is below yesterday's low, it shows that the market crowd is more bearish.

The relative positions of Directional lines identify trends. When the Positive Directional line is above the Negative Directional line, it shows that bullish traders dominate the market. When the Negative Directional line rises above the Positive Directional line, it shows that bearish traders are stronger. It pays to trade with the upper Directional line.

The Average Directional Indicator (ADX) rises when the spread between Directional lines increases. This shows that market leaders, for example bulls in a rising market, are becoming stronger, the losers weaker, and the trend is likely to continue.

ADX declines when the spread between Directional lines narrows down. This shows that the dominant market group is losing its strength, while the underdogs are gaining. It suggests that the market is in turmoil, and it's better not to use trend-following methods.

Trading Rules

1. Trade only from the long side when the positive Directional line is above the negative one. Trade only from the short side when the negative Directional line is above the positive one. The best time to

trade is when the ADX is rising, showing that the dominant group is getting stronger.

2. When ADX declines, it shows that the market is becoming less directional. There are likely to be many whipsaws. When ADX points down, it is better not to use a trend-following method.
3. When ADX falls below both Directional lines, it identifies a flat, sleepy market. Do not use a trend-following system but get ready to trade, because major trends emerge from such lulls.
4. The single best signal of the Directional system comes after ADX falls below both Directional lines. The longer it stays there, the stronger the base for the next move. When ADX rallies from below both Directional lines, it shows that the market is waking up from a lull. When ADX rises by four steps (i.e., from 9 to 13) from its lowest point below both Directional lines, it "rings a bell" on a new trend (Figure 24.2). It shows that a new bull market or bear market is being born, depending on what Directional line is on top.
5. When ADX rallies above both Directional lines, it identifies an overheated market. When ADX turns down from above both Directional lines, it shows that the major trend has stumbled. It is a good time to take profits on a directional trade. If you trade large positions, you definitely want to take partial profits.
6. Market indicators give hard signals and soft signals. For example, when a moving average changes direction, it is a hard signal. A downturn of ADX is a soft signal. Once you see ADX turn down, you ought to be very, very careful about adding to positions. You should start taking profits, reducing positions, and looking to get out.

Figure 24.2 ANV daily, 22-day EMA, Directional System (13). (*Chart by Stockcharts.com*)

Directional System

Swings between strength and weakness are a typical market feature. Strong stock groups grow weak while the weak ones become strong, and then they swap roles again. Gold and silver stocks were the two weakest stock industry groups in 2013, but they began bottoming out in December. Allied Nevada Gold Corp. (ANV) was one of several stocks I began buying at that time.

The low at point A was $3.07, at point B the stock dipped to $3.01 and recoiled, leaving behind a false downside breakout, and at point C it retested support by declining to $3.08—and from there it was off to the races, with its EMA turning up. The Directional system gave its buy signal during the bar marked with a vertical green arrow: the green bullish Directional line was above the red bearish line, while the ADX penetrated above the red line.

You may find a similar shorting signal in the lettered area, but a discretionary trader doesn't trade every signal he sees: shorting a stock near $3 that has already declined from $45 would mean chasing a very old trend.

Near the right edge you see a pullback to value, offering a good opportunity to add to the long position.

Average True Range—Help from Volatility

Average True Range (ATR) is an indicator that averages True Ranges (described in "How to Construct the Directional System" above) over a selected period of time, such as 13 days. Since volatility is a key factor in trading, you can track it by plotting a set of ATR lines above and below a moving average. They will help you visualize current volatility and you can use that for decision making.

Kerry Lovvorn likes to plot three sets of lines around a moving average: at one, two, and three ATRs above and below an EMA. These can be used for setting up entry points and stops, as well as profit targets (Figure 24.3).

Figure 24.3 LULU daily, 21 EMA, volume with 8 EMA, ATR channels. (*Chart by TradeStation*)

ATR Channels

This diary of a trade, Lululemon Athletica Inc. (LULU), was posted by Kerry in SpikeTrade .com, where we post diaries of our trades. It shows using ATR channels for profit-taking. LULU gapped down on a wide range bar on September 18 after an earnings announcement. There was no downside follow-through, and as the stock rallied, Kerry drew a horizontal line at the midpoint of its tall bar A, which tends to serve as short-term support.

As LULU pulled back, its daily ranges narrowed, and volume dried up in area B. Kerry bought LULU at $72.02 on Monday, September 30, during bar

C, as it recovered from a false downside breakout. He took profits on 1/3 of his position at $73.70 later that day, as LULU came within a few cents of plus 1 ATR. On Thursday, during bar D, LULU hit its plus 2 ATR at $76.63, and Kerry exited another 1/3 of his position. He took the remaining 1/3 near the mid-range of bar D.

Entries In the chapter on moving averages, we saw that it was a good idea to buy below value—below the EMA. But how far below? Normal pullbacks tend to bottom out near the minus one ATR.

Stops You want your stop to be at least one ATR away from your entry. Anything less than that would place your stop within the zone of normal market noise, making it likely to be hit by a random short-term move. Placing your stop further away makes it more likely that only a real reversal can hit your stop.

Targets After you buy a stock, depending on how bullish it appears to you, you can place an order to take profits at +1, +2, or even +3 ATRs. Kerry likes to get out of his winning positions in several steps, placing orders for taking profits for one third at 1 ATR, another third at 2 ATR, and the rest at 3 ATR.

It is highly unusual for any market to trade outside of three ATRs—three times average true range—for a long time. Those tend to be the extreme moves. Whenever you see a market trade outside of its three ATRs, either up or down, it is reasonable to expect a pullback.

ATR channels work not only with prices. We can also use them to bracket technical indicators to help identify the extreme levels where trends are likely to reverse. I use ATR channels on the weekly charts of Force Index.

25. Oscillators

While trend-following indicators, such as MACD Lines or Directional system, help identify trends, oscillators help catch turning points. Whenever masses of traders become gripped by greed or fear, they surge but after a while their intensity fizzles out. Oscillators measure the speed of any surge and show when its momentum is starting to break.

Oscillators identify emotional extremes of market crowds. They allow you to find unsustainable levels of optimism and pessimism. Professionals tend to fade those extremes. They bet against deviations and for a return to normalcy. When the market rises and the crowd gets up on its hind legs and roars from greed, professionals get ready to sell short. They get ready to buy when the market falls and the crowd howls in fear. Oscillators help us time those trades.

Overbought and Oversold

Overbought means a market is too high and ready to turn down. An oscillator becomes **overbought** when it reaches a high level associated with tops in the past. Oversold means a market is too low and ready to turn up. An oscillator becomes **oversold** when it reaches a low level associated with bottoms in the past.

Be sure to remember that those aren't absolute levels. An oscillator can stay overbought for weeks when a new strong uptrend begins, giving premature sell signals. It can stay oversold for weeks in a steep downtrend, giving premature buy signals. Knowing when to use oscillators and when to rely on trend-following indicators is a hallmark of a mature analyst (see Chapter 39).

We can mark overbought and oversold oscillator levels by horizontal reference lines. Place those lines so that they cut across only the highest peaks and the lowest valleys of that oscillator for the past six months. The proper way to draw those lines is to place them so that an oscillator spends only about 5 percent of its time beyond each line. Readjust these lines once every three months.

When an oscillator rises or falls beyond its reference line, it helps identify an unsustainable extreme, likely to precede a top or a bottom. Oscillators work

spectacularly well in trading ranges, but they give premature and dangerous signals when a new trend erupts from a range.

We've already reviewed one important oscillator—MACD-Histogram. We looked at it “ahead of schedule” because it's derived from a trend-following indicator, MACD Lines. We'll now explore very popular oscillators: Stochastic and Relative Strength Index (RSI).

26. Stochastic

Stochastic is an oscillator popularized by the late George Lane. It's now included in many software programs and widely used by computerized traders. Stochastic tracks the relationship of each closing price to the recent high-low range. It consists of two lines: a fast line called %K and a slow line called %D.

1. The first step in calculating Stochastic is to obtain "raw Stochastic" or %K:

$$\%K = \frac{C_{tod} - L_n}{H_n - L_n} \cdot 100$$

where

C_{tod} = today's close.

L_n = the lowest point for the selected number of days.

H_n = the highest point for the selected number of days.

n = the number of days for Stochastic, selected by the trader.

The standard width of Stochastic's time window is 5 days, although some traders use higher values. A narrow window helps catch more turning points, but a wider window helps identify more important turning points.

2. The second step is to obtain %D. It is done by smoothing %K—usually over a three-day period. It can be done in several ways, such as:

$$\%D = \frac{\text{3-day sum of } (C_{tod} - L_n)}{\text{3-day sum of } (H_n - L_n)} \cdot 100$$

There are two ways to plot Stochastic—Fast and Slow. **Fast Stochastic** consists of two lines—%K and %D—plotted on the same chart. It's very sensitive but leads to many whipsaws. Many traders prefer to use **Slow Stochastic**, adding an extra layer of smoothing. The %D of Fast Stochastic becomes the %K of Slow Stochastic and is smoothed by repeating step 2 to

obtain %D of Slow Stochastic. Slow Stochastic does a better job of filtering out market noise and leads to fewer whipsaws (Figure 26.1).

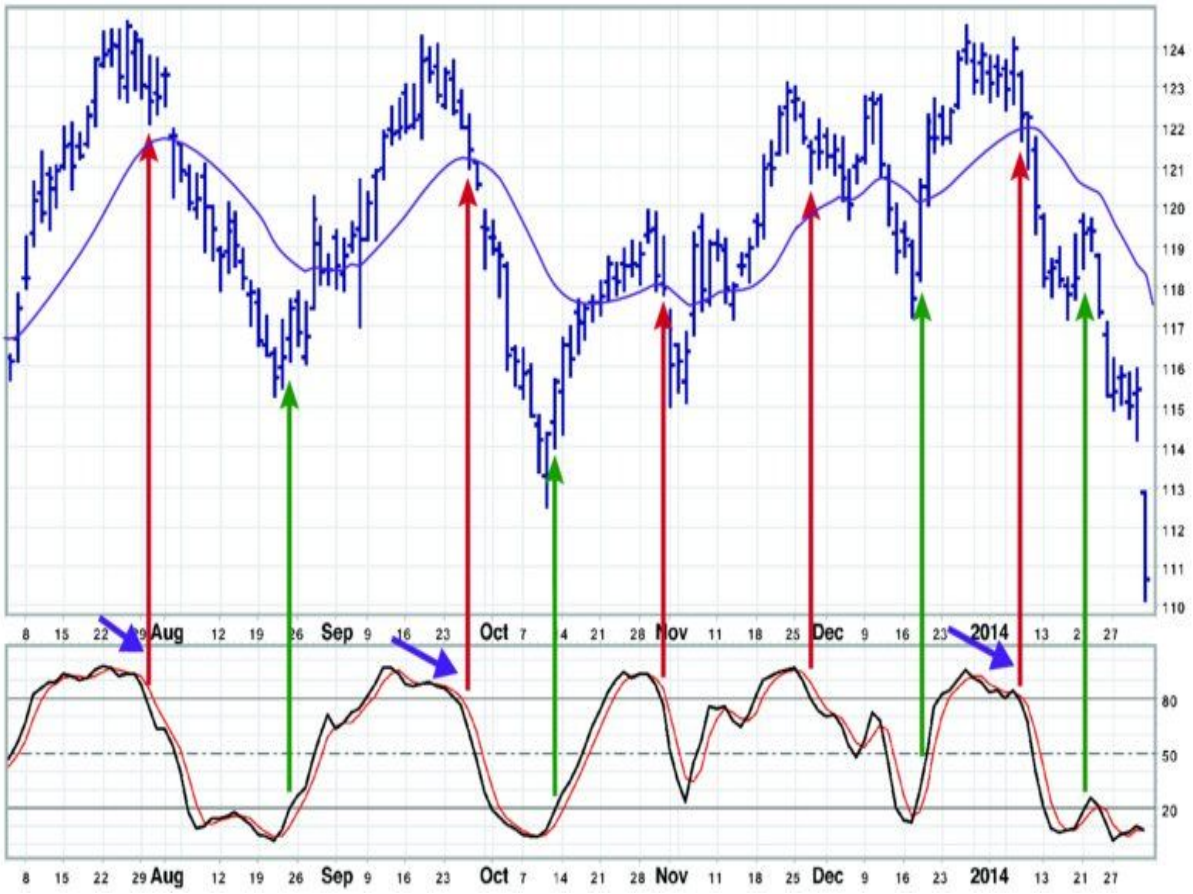


Figure 26.1 CVX daily, 26-day EMA. 5-day Slow Stochastic. (*Chart by Stockcharts.com*)

Stochastic

This chart of Chevron Corporation (CVX) illustrates both helpful and dangerous aspects of Stochastic. As long as the stock stays in a sideways trading range, which is where it was for most of the time covered by this chart, Stochastic keeps nailing down short-term tops and bottoms. Stochastic gives buy signals, marked here with vertical green arrows, when it rises above its lower reference line. It gives sell signals, marked by vertical red arrows, by sinking below its upper reference line. Those signals are reinforced by broad, down-sloping Stochastic tops, marked by diagonal black arrows.

A careful reader will find several instances of false breakouts in Figure 26.1 that reinforce Stochastic signals. Using Stochastic signals during a trading

range is like going to a cash machine. That machine stops working and eats your card after a trend erupts from the trading range. A sharp downtrend near the right edge overrides the Stochastic buy signal.

A trader may rely on Stochastic in a trading range, but should use protective stops because the last trade in a range always creates a loss when a trend begins. We'll focus on stop placement in chapter 54.

Stochastic is designed to fluctuate between 0 and 100. Reference lines are usually drawn at 20 percent and 80 percent levels to mark overbought and oversold areas.

Crowd Psychology

Each price is the consensus of value of all market participants at the moment of transaction. Daily closing prices are important because the settlement of trading accounts depends on them. The high of any period marks the maximum power of bulls during that time. The low of that period shows the maximum power of bears during that time.

Stochastic measures the capacity of bulls or bears to close the market near the upper or lower edge of the recent range. When prices rally, markets tend to close near the high. If bulls can lift prices during the day but can't close them near the top, Stochastic turns down. It shows that bulls are weaker than they appear and gives a sell signal.

Daily closes tend to occur near the lows in downtrends. When a bar closes near its high, it shows that bears can only push prices down during the day but cannot hold them down. An upturn of Stochastic shows that bears are weaker than they appear and flashes a buy signal.

Trading Rules

Stochastic shows when bulls or bears become stronger or weaker. This information helps decide whether bulls or bears are likely to win the current fight. It pays to trade with winners and against losers.

Stochastic gives three types of trading signals, listed here in the order of importance: divergences, the level of Stochastic lines, and their direction.

Divergences

The most powerful buy and sell signals of Stochastic are given by divergences between this indicator and prices.

1. A bullish divergence occurs when prices fall to a new low, but Stochastic traces a higher bottom than during its previous decline. It shows that bears are losing strength and prices are falling out of inertia. As soon as Stochastic turns up from its second bottom, it gives a strong buy signal: go long and place a protective stop below the latest low in the market. The best buy signals occur when the first bottom is below the lower reference line and the second above it.
2. A bearish divergence occurs when prices rally to a new high, but Stochastic traces a lower top than during its previous rally. It shows that bulls are becoming weaker and prices are rising out of inertia. As soon as Stochastic turns down from the second top, it gives a sell signal: go short and place a protective stop above the latest price peak. The best sell signals occur when the first top is above the upper reference line and the second below.

Overbought and Oversold

When Stochastic rallies above its upper reference line, it shows that the market is overbought. It means that a stock or even the entire market is unusually high and ready to turn down. When Stochastic falls below its lower reference line, it shows that a stock or even the entire market is oversold: too low and ready to turn up.

These signals work fine during trading ranges but not when a market develops a trend. In uptrends, Stochastic quickly becomes overbought and keeps giving sell signals while the market rallies. In downtrends, it quickly becomes oversold and keeps giving premature buy signals. It pays to combine Stochastic with a long-term trend-following indicator (see Chapter 39). The Triple Screen trading system allows traders to take buy signals from daily Stochastic only when the weekly trend is up. When the weekly trend is down, it allows traders to take only sell signals from daily Stochastic.

1. When you identify an uptrend on a weekly chart, wait for daily Stochastic lines to decline below their lower reference line. Then, without waiting for their crossover or an upturn, place a buy order

above the high of the latest price bar. Once you are long, place a protective stop below the low of the trade day or the previous day, whichever is lower.
The shape of Stochastic's bottom often indicates whether a rally is likely to be strong or weak. If the bottom is narrow and shallow, it shows that bears are weak and the rally is likely to be strong. If it is deep and wide, it shows that bears are strong and the rally is likely to be weak. It is better to take only strong buy signals.

2. When you identify a downtrend on a weekly chart, wait for daily Stochastic lines to rally above their upper reference line. Then, without waiting for their crossover or a downturn, place an order to sell short below the low of the latest price bar. By the time Stochastic lines cross over, the market is often in a free fall. Once you are short, place a protective stop above the high of the trade day or the previous day, whichever is higher.
   The shape of Stochastic's top often indicates whether a decline is likely to be steep or sluggish. A narrow top of Stochastic shows that bulls are weak and a severe decline is likely. A Stochastic top that is high and wide shows that bulls are strong—it is safer to pass up that sell signal.
3. Do not buy when Stochastic is overbought, and don't sell short when it is oversold. This rule filters out most bad trades.

Line Direction

When both Stochastic lines are headed in the same direction, they confirm the short-term trend. When prices rise and both Stochastic lines rise, the uptrend is likely to continue. When prices slide and both Stochastic lines fall, the short-term downtrend is likely to continue.

More on Stochastic

You can use Stochastic in any timeframe, including weekly, daily, or intraday. **Weekly** Stochastic usually changes its direction one week prior to weekly MACD-Histogram. If weekly Stochastic turns, it warns you that MACD-Histogram is likely to turn the next week—time to tighten stops on existing positions or start taking profits.

Choosing the **width of the Stochastic window** is important. Shorter-term oscillators are more sensitive. Longer-term oscillators turn only at important

tops and bottoms. If you use Stochastic as a stand-alone oscillator, a longer Stochastic is preferable. If you use Stochastic as part of a trading system, combined with trend-following indicators, then a shorter Stochastic is preferable.

27. Relative Strength Index

Relative Strength Index (RSI) is an oscillator developed by J. Welles Wilder, Jr. It measures any trading vehicle's strength by monitoring changes in its closing prices. It's a leading or a coincident indicator—never a laggard.

$$\text{RSI} = 100 - \frac{100}{1 + \text{RS}}$$

$$\text{RS} = \frac{\text{Average of net UP closing changes for selected period of days}}{\text{Average of net DOWN closing changes for the same number of days}}$$

RSI fluctuates between 0 and 100. When it reaches a peak and turns down, it identifies a top. When it falls and then turns up, it identifies a bottom. The pattern of RSI peaks and valleys doesn't change in response to the width of its time window. Trading signals become more visible with shorter RSI, such as 7 or 9 days. (Figure 27.1)

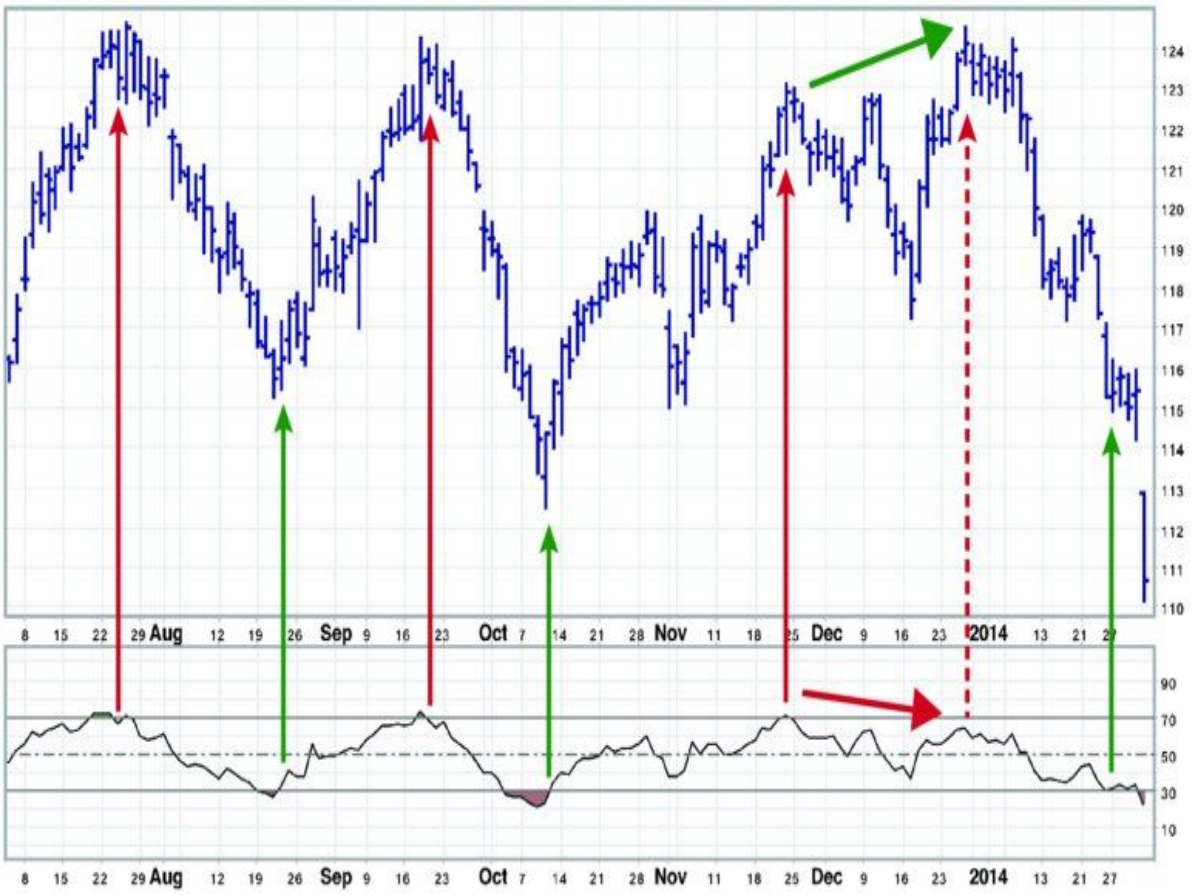


Figure 27.1 CVX daily, 13-day RSI. (*Chart by Stockcharts.com*)

Relative Strength Index (RSI)

Here we apply a 13-day RSI to the chart of Chevron Corporation (CVX) that we already examined in Figure 26.1, in the chapter on Stochastic. Both RSI and Stochastic work well in trading ranges, but give premature and dangerous signals when prices begin to trend.

RSI, based exclusively on closing prices, is less noisy than Stochastic. It calls for rallies when it rises above its lower reference line, marked here by vertical green arrows. It signals declines by sinking below its upper reference line, marked here by vertical red arrows. Comparing both charts, you see that the RSI signals emerge earlier.

A very powerful sell signal is given by a bearish divergence of RSI, marked here by a diagonal solid arrow and a dashed red arrow. The stock rallied to a new high, while RSI couldn't reach its upper reference line, pointing to that rally's hidden weakness.

The sharp break near the right edge pushes prices lower despite the RSI buy signal. To avoid getting hurt, we must use protective stops because the last trade in a range can easily create a loss when a new trend begins.

Overbought and oversold RSI levels vary from market to market and even from year to year in the same market. There are no magical levels for all tops and bottoms. Oversold and overbought signals are like hot and cold readings on a window thermometer. The same temperature levels mean different things in summer or winter.

Horizontal reference lines must cut across the highest peaks and the lowest valleys of RSI. They are often drawn at 30% and 70%. Some traders use 40% and 80% levels in bull markets or 20% and 60% in bear markets. Use the 5 percent rule: draw each line at a level beyond which RSI has spent less than 5 percent of its time in the past 4 to 6 months. Adjust reference lines once every three months.

Mass Psychology

Each price represents the consensus of value of all market participants at the moment of transaction. The closing price reflects the most important consensus of the day because the settlement of traders' accounts depends on

it. When the market closes higher, bulls make money and bears lose. When the market closes lower, bears make money and bulls lose.

Traders pay more attention to closing prices than to any other prices of the day. In the futures markets, money is transferred from losers' to winners' accounts at the end of each trading day. RSI shows whether bulls or bears are stronger at closing time—the crucial money-counting time in the market.

Trading Rules

RSI gives three types of trading signals. They are, in order of importance, divergences, chart patterns, and the level of RSI.

Bullish and Bearish Divergences

Divergences between RSI and prices tend to occur at important tops and bottoms. They show when the trend is weak and ready to reverse.

1. Bullish divergences give buy signals. They occur when prices fall to a new low but RSI makes a higher bottom than during its previous decline. Buy as soon as RSI turns up from its second bottom, and place a protective stop below the latest minor price low. Buy signals are especially strong if the first RSI bottom is below its lower reference line and the second bottom is above that line.
2. Bearish divergences give sell signals. They occur when prices rally to a new peak but RSI makes a lower top than during its previous rally. Sell short as soon as RSI turns down from its second top, and place a protective stop above the latest minor high. Sell signals are especially strong if the first RSI top is above its upper reference line and the second top is below it.

Charting Patterns

RSI often breaks through support or resistance a few days ahead of prices, providing hints of likely trend changes. RSI trendlines are usually broken one or two days before price trend changes.

1. When RSI breaks above its downtrend line, place an order to buy above the latest price peak to catch an upside breakout.

2. When RSI breaks below its uptrend line, place an order to sell short below the latest price low to catch a downside breakout.

RSI Levels

When RSI rises above its upper reference line, it shows that bulls are strong but the market is overbought and entering its sell zone. When RSI declines below its lower reference line, it shows that bears are strong but the market is oversold and entering its buy zone.

It pays to buy using overbought signals of daily RSI only when the weekly trend is up. It pays to sell short using sell signals of daily RSI only when the weekly trend is down (see Chapter 39).

1. Buy when RSI declines below its lower reference line and then rallies above it.
2. Sell short when RSI rises above its upper reference line and then crosses below it.

When we analyze markets, we deal with only a few numbers—the opening, high, low, and closing prices for each bar, plus volume, and also open interest for derivatives, such as futures and options. A typical beginner error is “shopping for indicators.” A trader may feel bullish about the stock market, but then he notices that the moving averages of the Dow and the S&P are still declining. Their bearish message doesn't sit well with him; he starts scrolling through his software menu and finds several oscillators, such as Stochastic or RSI. Sure enough, they look oversold, which is normal in a downtrend. The eager beginner takes those oversold readings as a signal to buy. The downtrend continues, he loses money—and then complains that technical analysis didn't work.

It is much better to use only a small number of indicators with a strict hierarchy for their analysis, including multiple timeframes. We'll return to this essential topic in the chapter on the Triple Screen trading system.

PART 5

Volume and Time

Many traders focus exclusively on price quotes, but while those are extremely important, there's more to the market than price. Volume of transactions provides a valuable additional dimension. Joseph Granville, a pioneer of volume studies, was fond of saying “Volume is the steam that makes the choo-choo go.”

Another hugely important factor of market analysis is time. Markets live and move in different timeframes at the same time. No matter how carefully you analyze the daily chart, its trend can be upended by a move that erupts from another timeframe.

In this section we'll focus on volume and volume-based indicators. We'll also look into tying all market decisions to their timeframes.

28. Volume

Volume reflects the activity of traders and investors. Each unit of volume represents actions of two individuals: one sells a share or a contract and another buys that share or a contract. Daily volume is the number of shares or contracts traded in one day (Figure 28.1).

Traders usually plot volume as a histogram—vertical bars whose height reflects each day's volume. They usually draw it underneath prices. Changes in volume show how bulls and bears react to price swings and provide clues to whether trends are likely to continue or to reverse.

Some traders ignore volume. They think that prices already reflect all information known to the market. They say, “You get paid on price and not on volume.”

Figure 28.1 BID daily, 22-day EMA, volume. *(Chart by Stockcharts.com)*

Volume

Sotheby's Holdings Inc. (BID) is the world's biggest publicly traded auction house. It provides a window into what the world's big money is doing in terms of their conspicuous consumption. This company's business was buoyed in 2013 by the influx of new money from Asia, but the stock hit its head on the ceiling during that year's last quarter.

In areas A and B, volume increased during the rally, confirming the uptrend and calling for higher prices ahead. In areas C and D, volume flashed warning signs for the bulls — it shrank during each rally attempt. Notice false upside breakouts in those areas and an atypical form of a kangaroo tail in area C. Rising volume near the right edge confirms the power of bears.

Professionals, on the other hand, know that analyzing volume can help them understand markets deeper and trade better.

Volume depends on the size of the trading crowd and the activity levels of buyers and sellers. If you compare volumes of two markets, you'll see which is more active or liquid. You are likely to receive better fills and suffer less slippage in liquid markets than in thin, low-volume markets.

There are three ways to measure volume:

1. The actual number of shares or contracts traded. For example, the New York Stock Exchange reports volume this way. This is the most objective way of measuring volume.
2. The number of trades that took place. Some international exchanges report volume this way. This method is less objective because it doesn't distinguish between a 100-share trade and a 5000-share trade.
3. Tick volume is the number of price changes during a selected period of time, such as 10 minutes or an hour. It is called tick volume because most changes equal 1 tick. Some exchanges don't report intraday volume, forcing day traders to use tick volume as a proxy for real volume.

A note to forex traders: since that market is decentralized and reports no volume, you can use the volume of currency futures as its proxy. Futures of

all major currencies, measured against the U.S. dollar, are traded in Chicago and on the electronic exchanges. We can assume that their volume trends are reasonably similar to those in the forex markets, since both respond to the same market forces.

Crowd Psychology

Volume reflects the degree of financial and emotional involvement, as well as pain, among market participants. A trade begins with a financial commitment by two persons. The decision to buy or sell may be rational, but the act of buying or selling creates an emotional commitment in most people. Buyers and sellers crave to be right. They scream at the market, pray, or use lucky talismans. The level of volume reflects the degree of emotional involvement among traders.

Each tick takes money away from losers and gives it to winners. When prices rise, longs make money and shorts lose. When prices fall, shorts gain and longs lose. Winners feel happy and elated, while losers feel depressed and angry. Whenever prices move, about half of the traders are hurting. When prices rise, bears are in pain, and when prices fall, bulls suffer. The greater the volume, the more pain in the market.

Traders react to losses like frogs to hot water. If you throw a frog into a hot pail, it'll jump in response to sudden pain, but if you put a frog into cool water and heat it slowly, you can boil it alive. If a sudden price change hits traders, they jump from pain and liquidate losing positions. On the other hand, losers can be very patient if their losses increase gradually.

You can lose a great deal of money in a sleepy stock or a future, such as corn, where a one-cent move costs only $50 per contract. If corn goes against you just a few cents a day, that pain is easy to tolerate. If you hang on, those pennies can add up to thousands of dollars in losses. Sharp moves, on the other hand, make losing traders cut their losses in a panic. Once weak hands get shaken out, leaving behind a volume spike, the market is ready to reverse. Trends can persist for a long time on moderate volume but can expire after a burst of volume.

Who buys from a trader who is selling his losing long position? It may be a short seller who wants to cover and take profits. It may be a bargain hunter who steps in because prices are “too low.” A bottom-picker takes over the

position of a loser who washed out—he either catches the bottom or becomes the next loser.

Who sells to a trader who buys to cover his losing short position? It may be a savvy investor who takes profits on his long position. It also may be a top-picker who sells short because he thinks that prices are “too high.” He assumes the position of a loser who covered his shorts, and only the future will tell whether he is right or wrong.

When shorts give up during a rally, they buy to cover and push the market higher. Prices rise, flush out even more shorts, and the rally feeds on itself. When longs give up during a decline, they sell, pushing the market lower. Falling prices flush out even more longs, and the decline feeds on itself. Losers who give up on their trades propel trends. A trend that moves on steady volume is likely to persist. It shows that new losers are replacing those who washed out.

When volume falls, it shows that the supply of losers is running low and a trend is ready to reverse. It happens after enough losers catch on to how wrong they are. Old losers keep bailing out, but fewer new ones come in. Falling volume is a sign that the trend is about to reverse.

A burst of extremely high volume also gives a signal that a trend is nearing its end. It shows that masses of losers are bailing out. You can probably recall holding a losing trade longer than you should have. Once the pain became intolerable and you got out, the trend reversed and the market went the way you expected, only without you. This happens time and again because most humans react to stress similarly and bail out at roughly the same time. Professionals don't hang on while the market beats them up. They quickly close out losing trades and reverse or wait on the sidelines, ready to re-enter.

Volume spikes are more likely to signal an imminent reversal of a downtrend than an uptrend. Volume spikes in downtrends reflect explosions of fear. Fear is a powerful but short-term emotion—people run fast, dump shares, and then the trend is likely to reverse. Volume spikes in uptrends are driven by greed, which is a slower-moving, happy emotion. There may be a slight pause in an uptrend after a volume spike, but then the trend is quite likely to resume.

Volume usually stays relatively low in trading ranges because there is relatively little pain. People feel comfortable with small price changes, and flat markets can drag on a long time. A breakout is often marked by a dramatic increase in volume because losers run for the exits. A breakout on low volume shows little emotional commitment to a new trend. It indicates that prices are likely to return into their trading range.

Rising volume during a rally shows that more buyers and short sellers are pouring in. Buyers are eager to buy even if they have to pay up, and shorts are eager to sell to them. Rising volume shows that losers who leave are being replaced by a new crop of losers.

When volume shrinks during a rally, it shows that bulls are becoming less eager, while bears are no longer running for cover. The intelligent bears have left long ago, followed by weak bears who could not take the pain. Falling volume shows that fuel is being removed from the uptrend and it's ready to reverse.

When volume dries up during a decline, it shows that bears are less eager to sell short, while bulls are no longer running for the exits. The intelligent bulls have sold long ago, and the weak bulls have been shaken out. Falling volume shows that the remaining bulls have greater pain tolerance. Perhaps they have deeper pockets or bought later in the decline, or both. Falling volume identifies an area in which a downtrend is likely to reverse.

This reasoning applies to all timeframes. As a rule of thumb, if today's volume is higher than yesterday's, then today's trend is likely to continue.

Trading Pointers

The terms “high volume” and “low volume” are relative. What's low for Amazon may be very high for a less popular stock, while what's low for gold is high for platinum, and so on. We compare volumes of different stocks, futures, or options only when selecting higher-volume trading vehicles. Most of the time, we compare current trading volume of a stock to its average volume. As a rule of thumb, “high volume” for any given market is at least 25 percent above its average for the past two weeks, while “low volume” is at least 25 percent below average.

1. High volume confirms trends. If prices rise to a new peak and volume reaches a new high, then prices are likely to retest or exceed that peak.
2. If the market falls to a new low and the volume reaches a new high, that bottom is likely to be retested or exceeded. A very high volume “climax bottom” is almost always retested on low volume, offering an excellent buying opportunity.
3. If volume shrinks while a trend continues, that trend is ripe for a reversal. When a market rises to a new peak on lower volume than its previous peak, look to take profits on a long position and/or for a shorting opportunity. This technique does not work as well in downtrends because a decline can persist on low volume. There is a saying on Wall Street: “It takes buying to put prices up, but they can fall of their own weight.”
4. Watch volume during reactions against the trend. When an uptrend is punctuated by a decline, volume often picks up in a flurry of profit taking. When that dip continues but volume shrinks, it shows that bulls are no longer running or that selling pressure is spent. When volume dries up, it shows that the reaction is nearing its end and the uptrend is ready to resume. This identifies a good buying opportunity. Major downtrends are often punctuated by rallies that begin on heavy volume. Once weak bears have been flushed out, volume shrinks and gives a signal to sell short.

29. Volume-Based Indicators

Several indicators help clarify volume's trading signals. For example, a 5-day EMA of volume can identify volume's trends. A rising EMA of volume affirms the current price trend, while a declining one points to the price trend's weakness.

This and other volume-based indicators provide more precise timing signals than volume bars. They include On-Balance Volume and Accumulation/Distribution, described below. Force Index combines price and volume data to help identify areas where prices are likely to reverse.

On-Balance Volume

On-Balance Volume (OBV) is an indicator designed by Joseph Granville and described in his book, *New Strategy of Daily Stock Market Timing.* Granville used OBV as a leading indicator of the stock market, but other analysts applied it to futures.

OBV is a running total of volume. Each day's volume is added or subtracted, depending on whether prices close higher or lower than on the previous day. When a stock closes higher, it shows that bulls won the day's battle; that day's volume is added to OBV. When a stock closes lower, it shows that bears won the day, and that day's volume is subtracted from OBV. If prices close unchanged, OBV stays unchanged. On-Balance Volume often rises or falls before prices, acting as a leading indicator.

Crowd Psychology

Prices represent the consensus of value, but volume represents the emotions of market participants. It reflects the intensity of traders' financial and emotional commitments, as well as pain among losers, which is what OBV helps to track.

A new high of OBV shows that bulls are powerful, bears are hurting, and prices are likely to rise. A new low of OBV shows that bears are powerful, bulls are hurting, and prices are likely to fall. When the pattern of OBV deviates from the pattern of prices, it shows that mass emotions aren't in gear with mass consensus. A crowd is more likely to follow its gut than its mind, and that's why changes in volume often precede price changes.

Trading Signals

The patterns of OBV tops and bottoms are much more important than the absolute levels, which depend on the starting date of your calculations. It is safer to trade in the direction of a trend that is confirmed by OBV (Figure 29.1).

1. When OBV reaches a new high, it confirms the power of bulls, indicates that prices are likely to continue to rise, and gives a buy signal. When OBV falls below its previous low, it confirms the power of bears, calls for lower prices ahead, and gives a signal to sell short.
2. OBV gives its strongest buy and sell signals when it diverges from prices. If prices rally, sell off, and then rise to a new high, but OBV rallies to a lower high, it creates a bearish divergence and gives a sell signal. If prices decline, rebound, and then fall to a new low, but OBV falls to a more shallow bottom, it traces a bullish divergence and gives a buy signal. Long-term divergences are more important than the short-term ones. Divergences that develop over the course of several weeks give stronger signals than those created over a few days.
3. When prices are in a trading range and OBV breaks out to a new high, it gives a buy signal. When prices are in a trading range and OBV breaks down and falls to a new low, it gives a signal to sell short.

More on OBV

One of the reasons for Granville's success in stock market timing was that he combined OBV with two other indicators—the **Net Field Trend indicator** and the **Climax indicator.** Granville calculated OBV for each stock in the Dow Jones Industrial Average and rated its OBV pattern as rising, falling, or neutral. He called that a Net Field Trend of a stock: It could be +1, −1, or 0. Climax indicator was a sum of the Net Field Trends of all 30 Dow stocks.

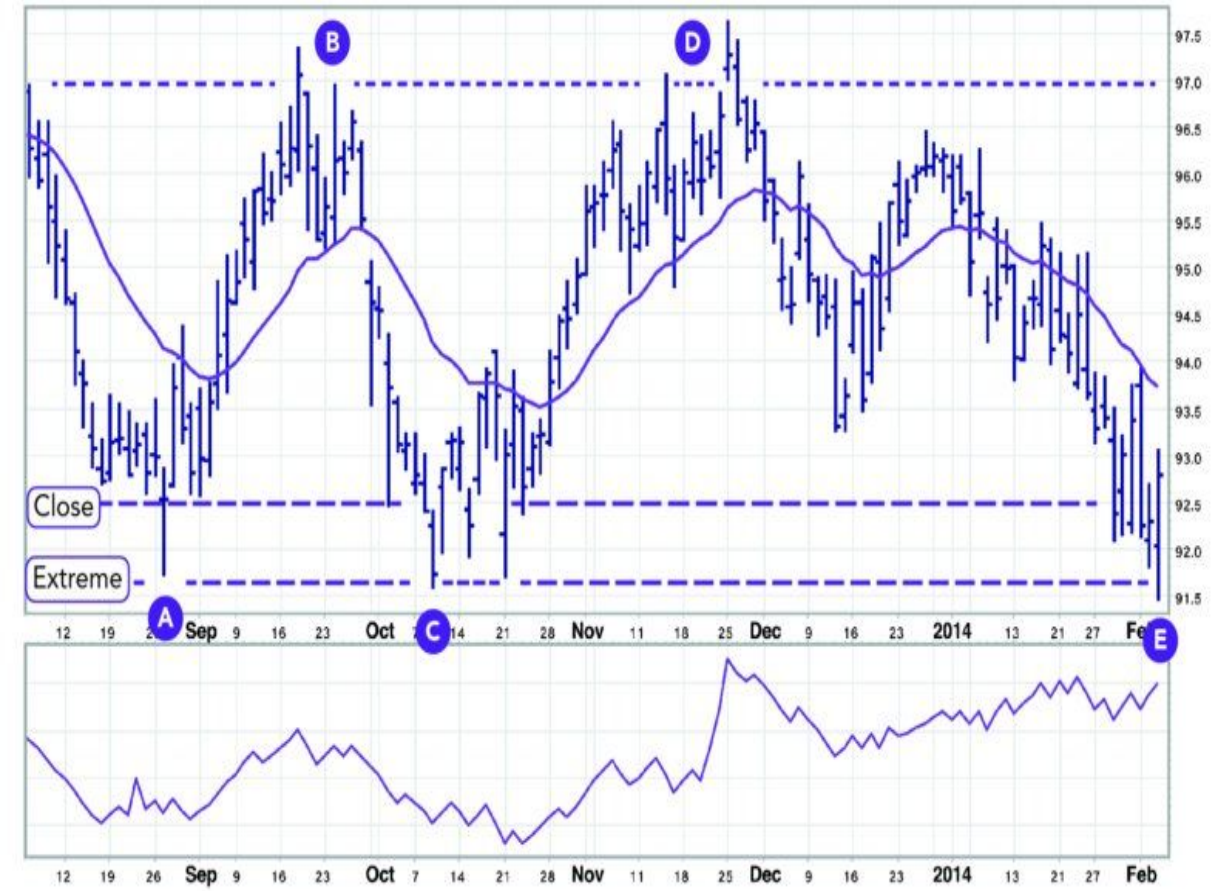


Figure 29.1 MCD daily, 22-day EMA, On-Balance volume (OBV). *(Chart by Stockcharts.com)*

On-Balance Volume

McDonald's Corp. (MCD) is a stable, slow-moving stock. You can see a fairly tight trading range, marked with dashed lines (two lines at the lows, one tight and the other loose). Notice the tendency of MCD towards false breakouts (bottoms A and C and tops B and D). Notice a kangaroo tail in area A.

At the right edge of the chart, the stock market is in a free-fall, but while MCD trades near its recent lows, its OBV indicator is trading near the highs. It points to strength and suggests buying rather than selling.

When the stock market rallied and the Climax indicator reached a new high, it confirmed strength and gave a buy signal. If the stock market rallied but the Climax indicator made a lower top, it gave a sell signal.

You can look at the Dow Jones Industrial Average as a team of 30 horses pulling the market wagon. The Climax indicator shows how many horses are pulling uphill, downhill, or standing still. If 24 out of 30 horses pull up, 1 down and 5 are resting, then the market wagon is likely to move up. If 9 horses pull up, 7 pull down, and 14 are resting, that wagon may soon roll downhill.

Remarkably, Granville did his calculations by hand[1]. Now, of course, OBV, the Net Field Trend indicator, and the Climax indicator can be easily programmed. It would be worthwhile to apply them to a database that includes all stocks of the S&P 500 index. This method may produce good signals for trading the S&P 500 futures and options.

Accumulation/Distribution

This indicator was developed by Larry Williams and described in his 1973 book, *How I Made One Million Dollars.* It was designed as a leading indicator for stocks, but several analysts applied it to futures. The unique feature of Accumulation/Distribution (A/D) is that it tracks the relationship between opening and closing prices, in addition to volume. Its concept is similar to that of Japanese candlesticks, which at the time Williams wrote his book weren't known to Western traders.

Accumulation/Distribution is more finely calibrated than OBV because it credits bulls or bears with only a fraction of each day's volume, proportionate to the degree of their win for the day.

$$\text{A/D} = \frac{\text{Close} - \text{Open}}{\text{High} - \text{Low}} \bullet \text{Volume}$$

If prices close higher than they opened, then bulls won the day, and A/D is positive. If prices close lower than they opened, then the bears won, and A/D is negative. If prices close where they opened, then nobody won, and A/D is zero. A running total of each day's A/D creates a cumulative A/D indicator.

For example, if today's high-low spread was five points but the distance from the open to the close was two points, then only 2/5 of today's volume is credited to the winning camp. Just as with OBV, the pattern of A/D highs and lows is important, while its absolute level simply depends on the starting date.

When the market rises, most people focus on new highs, but if prices open higher and close lower, then A/D, which tracks their relationship, turns down. It warns that the uptrend is weaker than it appears. If, on the other hand, A/D ticks up while prices are down, it shows that bulls are gaining strength.

Crowd Behavior

Opening prices reflect pressures that have built up while the market was closed. Openings tend to be dominated by amateurs who read their news in the evening and trade in the morning.

Professional traders are active throughout the day. They often trade against the amateurs. As the day goes on, waves of buying and selling by amateurs as well as slow-moving institutions gradually subside. Professionals tend to dominate the markets at closing time. Closing prices are especially important because the settlement of trading accounts depends on them.

A/D tracks the outcomes of daily battles between amateurs and professionals. It ticks up when prices close higher than they opened—when professionals are more bullish than amateurs. It ticks down when prices close lower than they opened—when professionals are more bearish than amateurs. It pays to bet with the professionals and against the amateurs.

Trading Rules

When the market opens low and closes high, it moves from weakness to strength. That's when A/D rises and signals that market professionals are more bullish than amateurs, and the upmove is likely to continue. When A/D falls, it shows that market professionals are more bearish than amateurs. When the market weakens during the day, it's likely to reach a lower low in the days to come.

The best trading signals are given by divergences between A/D and prices.

1. If prices rally to a new high but A/D reaches a lower peak, it gives a signal to sell short. This bearish divergence shows that market professionals are selling into the rally.
2. A bullish divergence occurs when prices fall to a new low but A/D bottoms out at a higher low than during its previous decline. It shows

that market professionals are using the decline for buying, and a rally is coming (Figure 29.2).

Figure 29.2 GOOG daily, Accumulation/Distribution Index. *(Chart by Stockcharts.com)*

Accumulation/Distribution

"Coming events cast their shadows before" is an old proverb with a lot of meaning for technical analysts. Google Inc. (GOOG) was trending lower for months, but the uptrend of the Accumulation/Distribution Index (A/D) showed that big money was buying. The stock has fallen lower at point B than at A, but the A/D Index traced out a much higher bottom. Just as important, it broke out to a new high (marked with a vertical green arrow) before prices gapped up following a surprisingly good earnings announcement. Somebody knew what was coming, and their massive buying was identified by the A/D accumulation pattern and its upside breakout. Technical analysis helps even out the imbalance of knowledge between outsiders and insiders.

More on Accumulation/Distribution

When you go long or short, following a divergence between A/D and price, remember that even market professionals can go wrong. Use stops and protect yourself by following the **Hound of the Baskervilles** rule (see Chapter 23).

There are important parallels between A/D and Japanese candlestick charts, since both focus on the differences between opening and closing prices. A/D goes further than candlesticks by taking volume into account.

30. Force Index

Force Index is an oscillator developed by this author. It combines volume with prices to discover the force of bulls or bears behind every rally or decline. Force Index can be applied to any price bar for which we have volume data: weekly, daily, or intraday. It brings together three essential pieces of information—the direction of price change, its extent, and the volume during that change. It provides a practical way of using volume for making trading decisions.[2]

Force Index can be used in its raw form, but its signals stand out much more clearly if we smooth it with a moving average. Using a short EMA of Force Index helps pinpoint entry and exit points. Using a longer EMA helps confirm trends and recognize important reversals.

How to Construct Force Index

The force of every move is defined by three factors: direction, distance, and volume.

1. If prices close higher than the close of the previous bar, the force is positive. If prices close lower than the close of the previous bar, the force is negative.
2. The greater the change in price, the greater the force.
3. The bigger the volume, the greater the force.

$$\text{Force Index} = \text{Volume}_{\text{today}} \bullet (\text{Close}_{\text{today}} - \text{Close}_{\text{yesterday}})$$

A raw Force Index can be plotted as a histogram, with a horizontal center line at a zero level. If the market closes higher, Force Index is positive and rises above the center line. If the market closes lower, Force Index is negative and extends below the center line. If the market closes unchanged, Force Index is zero.

The histogram of a raw Force Index is very jagged. This indicator gives much better trading signals after being smoothed with a moving average (see Chapter 22).

A 2-day EMA of Force Index provides a minimal degree of smoothing. It is useful for finding entry points into the markets. It pays to buy when the 2-day EMA is negative and sell when it's positive, as long as you trade in the direction of the trend.

A 13-day EMA of Force Index tracks longer-term changes in the force of bulls and bears. When the 13-day EMA crosses above the centerline, it shows that bulls are in control and suggests trading from the long side. When the 13-day EMA turns negative, it shows that bears are in control and suggests trading from the short side. Divergences between a 13-day EMA of Force Index and prices identify important turning points.

Trading Psychology

When the market closes higher, it shows that bulls won the day's battle, and when it closes lower, it shows that bears carried the day. The distance between today's and yesterday's closing prices reflects the margin of victory by bulls or bears. The greater this distance, the larger the victory achieved.

Volume reflects the degree of emotional commitment by market participants (see Chapter 28). High-volume rallies and declines have more inertia and are more likely to continue. Prices moving at high volume are like an avalanche that gathers speed as it rolls. Low volume, on the other hand, shows that the supply of losers is thin, and a trend is probably nearing an end.

Prices reflect what market participants think, while volume reflects the strength of their feelings. Force Index combines price and volume—it shows whether the head and the heart of the market are in gear with each other.

When Force Index rallies to a new high, it shows that the force of bulls is high and the uptrend is likely to continue. When Force Index falls to a new low, it shows that the force of bears is intense and the downtrend is likely to persist. If the change in prices is not confirmed by volume, Force Index flattens and warns that a trend is about to reverse. It also flattens and warns of a nearing reversal if high volume generates only a small price move.

Trading Rules

Short-Term Force Index

A 2-day EMA of Force Index is a highly sensitive indicator of the short-term force of bulls and bears. When it swings above its centerline, it shows that bulls are stronger, and when it falls below the centerline, it shows that bears are stronger.

Since the 2-day EMA of Force Index is a sensitive tool, we can use it to fine-tune signals of other indicators. When a trend-following indicator identifies an uptrend, the declines of the 2-day EMA of Force Index below zero pinpoint the best buying points: buying pullbacks during a long-term rally (Figure 30.1). When a trend-following tool identifies a downtrend, rallies of a 2-day EMA of Force Index mark the best shorting areas.

Figure 30.1 ADBE daily, 26-day EMA, 2-day Force Index. *(Chart by Stockcharts.com)*

Short-Term Force Index

Later in this book we'll return to the all-important topic of using multiple timeframes to make trading decisions. For example, you may make your strategic decision—to be a bull or a bear—on a weekly chart and then make your tactical decisions on where to buy or sell short using a daily chart.

In the case of Adobe Systems, Inc. (ADBE), there is a steady uptrend on the weekly chart, confirmed by its rising EMA (not shown). When the weekly trend is up, a 2-day Force Index on the daily chart provides an ongoing series of signals that identify buy points. Instead of chasing strength and buying high, it's better to buy during short-term pullbacks, when a wave goes against the tide. Those waves are marked by the 2-day Force Index dropping below zero. Once the 2-day Force Index goes negative, it makes sense to start placing buy orders above the latest bar's high. This will ensure you'll be stopped into a long trade as soon as the downwave loses it power.

1. Buy when a 2-day EMA of Force Index turns negative during uptrends.
   Even a fast and furious uptrend has occasional pullbacks. If you delay buying until the 2-day EMA of Force Index turns negative, you'll buy closer to a short-term bottom. Most people chase rallies and then get hit by drawdowns they find hard to tolerate. Force Index helps find buying opportunities with lower risks.
   When a 2-day EMA of Force Index turns negative during an uptrend, place a buy order above the high price of that day. When the uptrend resumes and prices rally, you'll be stopped in on the long side. If prices continue to decline, your order will not be executed. Keep lowering your buy order to near the high of the latest bar. Once your buy stop is triggered, place a protective stop below the latest minor low. This tight stop is seldom touched in a strong uptrend, but it'll get you out early if the trend is weak.
2. Sell short when a 2-day EMA of Force Index turns positive in a downtrend.
   When trend-following indicators identify a downtrend, wait until the 2-day EMA of Force Index turns positive. It reflects a quick splash of bullishness—a shorting opportunity. Place an order to sell short below the low of the latest price bar.
   If the 2-day EMA of Force Index continues to rally after you place your sell order, raise your order the next day to near the previous bar's low. Once prices slide and you enter a short trade, place a protective stop above the latest minor peak. Move your stop down to a break-even level as early as possible.

Additionally, a 2-day EMA of Force Index helps decide when to pyramid positions. You can add to longs in uptrends each time Force Index turns negative; you can add to shorts in downtrends whenever Force Index turns positive.

Force Index even provides a glimpse into the future. When a 2-day EMA of Force Index falls to its lowest low in a month, it shows that bears are strong and prices are likely to fall even lower. When a 2-day EMA of Force Index rallies to its highest level in a month, it shows that bulls are strong and prices are likely to rise even higher.

A 2-day EMA of Force Index helps decide when to close out a position. It does it by identifying short-term splashes of mass bullishness or bearishness. A short-term trader who bought when this indicator was negative can sell when it turns positive. A short-term trader who went short when this indicator was positive can cover when it turns negative. A longer-term trader should get out of his position only if a trend changes (as identified by the slope of a 13-day EMA of price) or if there is a divergence between the 2-day EMA of Force Index and the trend.

3. Bullish divergences between the 2-day EMA of Force Index and price give strong buy signals. A bullish divergence occurs when prices fall to a new low while Force Index makes a more shallow low.
4. Bearish divergences between the 2-day EMA of Force Index and price give strong sell signals. A bearish divergence occurs when prices rally to a new high while Force Index traces a lower second top.
5. Whenever the 2-day EMA of Force Index spikes down to five times or more its usual depth and then recoils from that low, expect prices to rally in the coming days.

   Markets fluctuate between overbought and oversold, and when they recoil from a down spike, we can expect a rally. Note that this signal doesn't work well in uptrends—markets recoil from down spikes but not from up spikes. Spikes that point down reflect intense fear, which doesn't persist for very long. Spikes that point up reflect excessive enthusiasm and greed, which can persist for quite a long time.

   A 2-day EMA of Force Index fits well into the Triple Screen trading system (see Chapter 39). Its ability to find short-term buying and selling

points is especially useful when you combine Force Index with a longer-term trend-following indicator.

Intermediate-Term Force Index

A 13-day EMA of Force Index identifies longer-term changes in the balance of power between bulls and bears. When it rises above zero, the bulls are stronger, and when it falls below zero, the bears are in charge. Its divergences from prices identify intermediate and even major turning points (Figure 30.2). Its spikes, especially near the bottoms, mark approaching trend reversals.

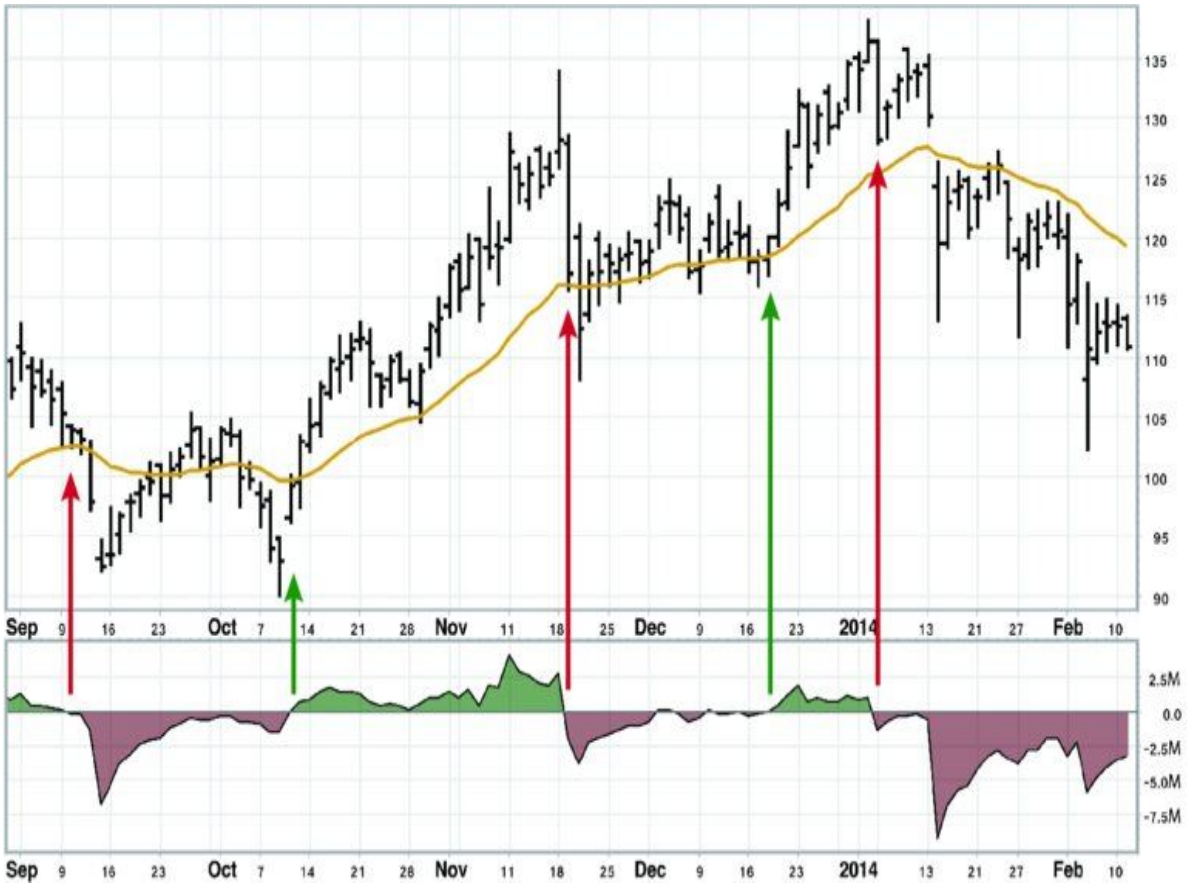


Figure 30.2 SSYS daily, 26-day EMA, 13-day Force Index. *(Chart by Stockcharts.com)*

Long-Term Force Index

Stratasys, Inc. (SSYS) is one of the two leading companies in the rapidly emerging additive manufacturing (AM) market. In the two years since I wrote the world's first popular e-book on investing in this technology, AM stocks have become investors' favorites. A technical pattern has emerged,

with rallies driven by amateurs piling in and sharp declines as they panic and bail out. The 13-day Force Index does a good job of catching those waves.

When the 13-day Force Index crosses above its zero line (marked by vertical green arrows), it shows that buying volume is coming in. That's where a longer-term trader buys and holds. When the 13-day Force declines below its zero line and stays there, it shows that bears predominate.

Near the right edge of the screen, we see a record low of Force Index, but then bears begin to weaken, as Force Index starts inching towards zero. Keep your powder dry as you wait for an accumulation pattern to emerge and be confirmed by Force Index crossing above zero. This see-saw movement of stocks passing from strong hands into weak ones near the tops and back again near the lows goes on forever. Force Index can help you position yourself with the right group.

The raw Force Index identifies the winning team in the battle between bulls and bears in any price bar, be it weekly, daily, or intraday. We get much clearer signals by smoothing the raw Force Index with a moving average.

1. When a 13-day EMA of Force Index is above the centerline, bulls are in control of the market. When it is below the centerline, bears are in charge.
   When a rally begins, prices often jump on heavy volume. When a 13-day EMA of Force Index reaches a new high, it confirms the uptrend. As an uptrend grows older, prices tend to rise more slowly, and volume becomes thinner. That's when a 13-day EMA of Force Index starts tracing lower tops. When it drops below its zero line, it signals that the back of the bull has been broken.
2. A new peak of the 13-day EMA of Force Index shows that bulls are very strong and a rally is likely to continue. A bearish divergence between a 13-day EMA of Force Index and price gives a strong signal to sell short. If prices reach a new high but this indicator traces a lower peak, it warns that bulls are losing power and bears are ready to take control.
   Note that for a divergence to be legitimate, this indicator must make a new peak, then fall below its zero line, and then rise above that line

again, but tracing a lower peak, which creates a divergence. If there is no crossover, then there is no legitimate divergence.

3. A new low in the 13-day EMA of Force Index shows that a downtrend is likely to continue. If prices fall to a new low but this indicator rallies above zero and then falls again, but to a more shallow low, it completes a bullish divergence. It reveals that bears are losing power and gives a buy signal.
   When a downtrend begins, prices usually drop on heavy volume. When a 13-day EMA of Force Index falls to a new low, it confirms the decline. As the downtrend grows old, prices fall more slowly or volume dries up—that's when a reversal is in the cards.
   Adding an envelope to the chart of Force Index can help you detect its extreme deviations from the norm, which tend to lead to price trend reversals. This method for catching deviations and potential reversals works well with weekly charts, but not with the daily and intraday charts. This is truly a longer-term tool.

31. Open Interest

Open interest is the number of contracts held by buyers or owed by short sellers in any derivative market, such as futures or options. If you are unfamiliar with futures or options, skip this chapter and return to it after you have read Chapters 44 on options and 46 on futures.

Stock market shares are traded for as long as the company that listed them stays in business as an independent unit. Most shares are held as long positions, with only a small percentage of shorts. In futures and options, on the other hand, the total size of long and short positions is always identical, due to the fact that they are contracts for future delivery. When someone wants to buy a contract, someone else has to sell it to them, i.e., go short. If you want to buy a call option for 100 shares of Google, another trader has to sell you that option; in order for you to be long, someone else has to be short. **Open interest equals the total long or the total short positions**.

Futures and options contracts are designed to last for only a set period of time. A futures or options buyer who wants to accept delivery and a seller who wants to deliver have to wait until the first delivery day. This waiting period ensures that the numbers of contracts held long and short are always equal. In any case, very few futures and options traders plan to deliver or accept delivery. Most traders close out their positions early, settling in cash long before the first notice day. We'll return to the topic of futures and options in Part Eight of this book on trading vehicles.

Open interest rises when new positions are being created and falls when positions are being closed. For example, if open interest in April COMEX gold futures is 20,000 contracts, it means that bulls are long and bears short 20,000 contracts. If open interest rises to 20,200, it means that the net of 200 new contracts have been created: both bought and sold short.

Open interest falls when a bull who is long sells to a bear who is short but wants to cover his short position. As both of them get out, open interest falls by the size of their trade, since one or more contracts disappear from that market.

If a new bull buys from an old bull that is getting out of his long position, open interest remains unchanged. Nor does the open interest change when a new bear sells to an old bear who wants to buy to cover his short position. In

summary, open interest rises when “fresh blood” enters that market and falls as current bulls and bears start leaving that market, as illustrated in the table below:

Buyer	Seller	Open Interest
New buyer	New seller	Increases
New buyer	Former buyer sells	Unchanged
Former seller buys to cover	New seller	Unchanged
Former seller buys to cover	Former buyer sells	Decreases

Technicians usually plot open interest as a line below price bars (Figure 31.1). Open interest in any market varies from season to season because of massive hedging by industrial users and producers at different stages of the annual production cycle. Open interest gives important messages when it deviates from its seasonal norm.

Crowd Psychology

It takes one bull and one bear to create a futures or options contract. A bull who believes that prices will rise buys a contract. A bear who thinks that prices are going to drop goes short by selling a contract for future delivery. With a trade between a new bull and a new bear, open interest rises by the number of contracts they traded. A single trade is unlikely to move any market, but when thousands of traders make similar trades, they propel or reverse market trends.

Figure 31.1 TYH14 daily, 13-day EMA, open interest. *(Chan by TradeStation)*

Open Interest

Open interest (OI) reflects the number of all short or long positions in any futures or options market. Since the two are equal in the derivatives markets, OI reflects the degree of conviction among bulls and bears.

Rising OI shows that the conflict between bulls and bears is becoming more intense and confirms the exiting trend. Falling OI, on the other hand, shows that losers are leaving the market, while the winners are cashing in—it signals that the trend is nearing its end.

Near the left edge of this chart of March 2014 Treasury Notes futures (TYH14), the trend is down, but the declining OI warns bears not to overstay the downtrend. OI bottomed out in area A, T-Notes in area B, and in area C, both were in clear uptrends, with rising OI calling for higher prices ahead. OI topped out in area D, and while prices continue to rise in area E, the new downtrend of OI serves up a warning to the bulls near the right edge of the chart.

Not all charts of open interest look as smooth and clear as this one. Serious traders don't expect to find a magic tool of a single indicator—they use

several indicators and act only when their messages confirm one another.

Open interest reflects the intensity of conflict between bulls and bears. It depends on their willingness to maintain long and short positions. When bulls and bears don't expect the market to move in their favor, they close out their positions, reducing open interest.

There are two people on the opposite sides of every trade, and one of them will be hurt when prices change. In a rally, bears will get hurt, and in a decline, bulls will suffer. As long as the losers hold on, hoping and hanging on to their positions, open interest doesn't change.

A rise in open interest shows that a crowd of confident bulls is facing down a crowd of equally confident bears. It points to a growing disagreement between the two camps. One group is sure to lose, but as long as potential losers keep pouring in, the trend will continue. These ideas have been clearly put forth in L. Dee Belveal's classic book, *Charting Commodity Market Price Behavior.*

It takes conviction among both bulls and bears to maintain a trend. Rising open interest shows that both camps keep adding to their positions. If they strongly disagree about the future course of prices, then the supply of losers is growing, and the current trend is likely to persist. An increase in open interest gives a green light to the existing trend.

If open interest rises during an uptrend, it shows that longs are buying while bears are shorting because they believe that the market is overvalued. They are likely to run for cover when the uptrend squeezes them harder—and their buying will propel prices higher.

If open interest rises during a downtrend, it shows that shorts are aggressively selling, while bottom pickers are buying. Those bargain hunters are likely to bail out when falling prices hurt them, and their selling will push prices even lower.

When a bull is convinced that prices are going higher and decides to buy, but a bear is afraid to sell short, that bull can buy only from another bull who bought earlier and now wants to cash out. Their trade creates no new contract, and open interest stays unchanged. When open interest goes flat during a rally, it shows that the supply of losers has stopped growing.

When a bear is convinced that prices are going lower and wants to sell short, but a bull is afraid to buy from him, that bear can sell only to another bear who shorted earlier and now wants to cover, take profits and leave. Their trade creates no new contract, and open interest does not change. When open interest stays flat during a decline, it shows that the supply of bottom pickers isn't growing. Whenever open interest flattens out, it flashes a yellow light—a warning that the trend is aging and the best gains are probably behind.

When a bull decides to get out of his long position, a bear decides to cover his short position, and the two trade with one another, a contract disappears, and open interest shrinks. Falling open interest shows that losers are bailing out, while winners are taking profits. When the disagreement between bulls and bears decreases, the trend is ripe for a reversal. Falling open interest shows that winners are cashing in and losers are giving up hope. It signals that the trend is approaching its end.

Trading Rules

1. When open interest rises during a rally, it confirms the uptrend and gives a green light to add to long positions. It shows that more short sellers are coming into the market. When they bail out, their short covering is likely to push the rally higher.
   When open interest rises as prices fall, it shows that bottom pickers are active in the market. It gives a green light to shorting because those bargain hunters are likely to push prices lower when they throw in the towel.
   If open interest rises when prices are in a trading range, it's a bearish sign. Commercial hedgers are much more likely to sell short than speculators. A sharp increase in open interest while prices are flat shows that savvy hedgers are probably shorting the market. You want to avoid trading against those who likely have better information than you.
2. If open interest falls while prices are in a trading range, it identifies short covering by major commercial interests and gives a buy signal. When commercials start covering shorts, they show that they expect the market to rise.
   When open interest falls during a rally, it shows that winners and losers alike are becoming cautious. Longs are taking profits, and shorts are covering. Markets discount the future, and a trend that is accepted by

the majority is ready to reverse. If open interest falls during a rally, consider selling and getting out.
When open interest falls during a decline, it shows that shorts are covering and buyers are taking losses and bailing out. If open interest falls while prices slide, take profits on short positions.

3. When open interest goes flat during a rally, it shows that the uptrend is getting old and the best gains have already been made. This gives you a signal to tighten stops on long positions and avoid new buying. When open interest goes flat during a decline, it warns you that the downtrend is mature and it is best to tighten stops on short positions. Flat open interest in a trading range does not contribute any new information.

More on Open Interest

The higher the open interest, the more active the market, and the less **slippage** you risk when getting in and out of positions. Short-term traders should focus on the contracts with the highest open interest. In the futures markets, the highest open interest tends to be in the front months. As the first notice day approaches and open interest of the front month begins to drop, while open interest in the next month begins to rise, it signals to roll over your position into the next month.

32. Time

Most people conduct their lives as if they will live forever — repeating the same mistakes, not learning from the past, and hardly ever planning for the future. Freud showed that the unconscious mind doesn't have the notion of time. Our deep-seated wishes remain largely unchanged throughout our lives.

When people join crowds, their behavior becomes even more primitive and impulsive. Individuals may be ruled by the calendar and the clock, but crowds pay no attention to time. They act out their emotions as if they had all the time in the world.

Most traders focus only on changing prices but pay little attention to time. That's just another sign of being caught up in mass mentality.

The awareness of time is a sign of civilization. A thinking person is aware of time, while someone who is acting impulsively is not. A market analyst who pays attention to time becomes aware of a dimension hidden from the market crowd.

Cycles

Long-term price cycles are a fact of economic life. For example, the U.S. stock market tends to run in approximately four-year cycles. They exist because the ruling party inflates the economy going into the presidential election every four years. The party that wins the election deflates the economy when voters can't take revenge at the polls. Flooding the economy with liquidity lifts the stock market, while draining liquidity pushes it down[3].

Major cycles in agricultural commodities are due to weather and fundamental production factors, coupled with the mass psychology of producers. For example, when livestock prices rise, farmers breed more animals. When those animals reach the market, prices fall and producers cut back. When the supply is absorbed, scarcity pushes prices up, breeders go to work again, and the bull/bear cycle repeats. This cycle is shorter in hogs than in cattle because pigs breed faster than cows.

Long-term cycles can help traders identify market tides. Instead, many traders get themselves in trouble by trying to use short-term cycles to predict

minor turning points.

Price peaks and valleys often seem to flow in an orderly manner. Traders measure distances between neighboring peaks, and project them into the future to forecast the next top. Then they measure distances between bottoms and extend them into the future to forecast the next low. Cycles put bread and butter on the tables of analysts who sell forecasts. Few of them realize that what appears like a cycle on the charts is often a figment of the imagination. If you analyze price data using a mathematically rigorous program, such as John Ehlers's MESA (Maximum Entropy Spectral Analysis), you'll find that approximately 80 percent of what looks like cycles is simply market noise. A human mind looks for order—and even an illusion of order is good enough for many people.

If you look at any river from the air, it appears to have cycles, swinging right and left. Every river meanders in its valley because water flows faster in its middle than near the shores, creating turbulences that force the river to turn. Looking for short-term market cycles with a ruler and a pencil is like searching for water with a divining rod. Profits from an occasional success are erased by many losses due to unsound methods.

Indicator Seasons

A farmer sows in spring, harvests in late summer, and in the fall, lays in supplies for the winter. There is a time to sow and a time to reap, a time to bet on a warm trend and a time to get ready for a frost. We can apply the concept of seasons to financial markets. Taking a farmer's approach, a trader should look to buy in spring, sell in summer, go short in the fall, and cover in winter.

Martin Pring developed the model of seasons for prices, but this concept works even better with technical indicators. Their seasons help recognize the current stage of the market cycle. This simple but effective model helps you buy when prices are low and sell short when they are high, setting you apart from the market crowd.

We can define the seasons of many indicators by two factors: their slope as well as their position above or below the centerline. For example, let's apply the concept of indicator seasons to MACD-Histogram (see Chapter 23). We define the slope of MACD-Histogram as the relationship between two neighboring bars. When MACD-Histogram rises below its centerline, it is

spring; when it rises above its centerline, it is summer; when it falls above its centerline, it is autumn; and when it falls below its centerline, it is winter. Spring is the best season for going long, and autumn is the best season for selling short (Figure 32.1).

Indicator Slope	Position Relative to Centerline	Season	Preferred Action
Rising	Below	Spring	Go long
Rising	Above	Summer	Start selling
Falling	Above	Fall	Go short
Falling	Below	Winter	Start covering

When MACD-Histogram is below its centerline but its slope is rising, it is spring in the market. The weather is cool but turning warmer. Most traders expect the winter to return and are afraid to buy. Emotionally, it is hard to buy because the memories of a downtrend are still fresh. In fact, spring is the best time for buying, with the highest profit potential, while risks are relatively small because we can place a protective stop slightly below the market.

When MACD-Histogram rises above its centerline, it's summer in the market—and by now most traders recognize the uptrend. It's emotionally easy to buy in summer because bulls have plenty of company. In fact, profit potential in summer is lower than in spring, while the risks are higher because stops have to be farther away from the market due to heightened volatility.

When MACD-Histogram is above its centerline but its slope turns down, it's autumn in the market. Few traders recognize that change and keep buying, expecting summer to return. Emotionally, it's hard to sell short in autumn—it requires you to stand apart from the crowd. In fact, autumn is the best time for selling short.

When MACD-Histogram falls below its centerline, it's winter in the market. By then, most traders recognize the downtrend. It is emotionally easy to sell short in winter, joining many vocal bears. In fact, the risk/reward ratio is rapidly shifting against bears, as potential rewards are becoming smaller and risks higher because stops have to be placed relatively far away from prices.

Just as a farmer must pay attention to the vagaries of weather, a trader needs to stay alert. An autumn on the farm can be interrupted by an Indian summer, and a market can stage a strong rally in the autumn. A sudden freeze can hit the fields in spring, and the market can drop early in a bull move. A trader needs to use several indicators and techniques to avoid getting whipsawed.

The concept of indicator seasons focuses a trader's attention on the passage of time. It helps you plan for the season ahead instead of mindlessly following other people.

Figure 32.1 VRTX daily, MACD-Histogram 12-26-9. *(Chart by Stockcharts.com)*

Indicator Seasons

We can apply the concept of seasons to most indicators and timeframes, including intraday. This can be done with a multitude of trading vehicles, even though this example focuses on the daily MACD-Histogram of Vertex Pharmaceuticals, Inc. (VRTX), a stock in the Nasdaq 100.

Autumn—The indicator is above the centerline but falling. This is the best season for establishing shorts.

Winter—The indicator drops below its centerline. Use weakness to take profits on short positions.

Spring—The indicator turns up from below its centerline. It is the best time to establish longs.

Summer—The indicator rises above its centerline. As the weather gets hot, use strength to take profits on long positions.

MACD-Histogram looks very smooth in this example, but be prepared for brief fluctuations, both above and below the centerline. Spring can be interrupted by a frost, there can be a warm spell in winter, etc.

Market Time

We measure time using calendars and watches, but seldom stop to think that our own perceptions of time are far from universal. We keep track of time in human terms, while huge areas of life move on vastly different timelines.

For example, we think that the ground under our feet is stable, while in fact continents move constantly. They traverse only a few inches per year, but this is enough to radically change the face of the globe over millions of years. Within shorter timeframes, weather patterns change over centuries. Ice ages and warming periods alternate with one another.

At the other end of the scale, there are physical particles that survive only a tiny fraction of a second. There are insects that are born, mature, procreate, and the within a single day.

Turning to trading, let's keep in mind that time flows at a different speed in the market than it does for us as individuals. The market, composed of huge masses of human beings, moves at a much slower speed. The patterns you recognize on your charts may have predictive value—but the turns they anticipate are likely to occur much later than you expect.

The relative slowness of crowds can bedevil even experienced traders. Time and again we find ourselves entering trades too early. Beginners are typically late. By the time they recognize a trend or a reversal, that move had been

underway for so long that they miss most, if not all of it. Newbies tend to chase old trends, but the more experienced analysts and traders tend to run into an opposite problem. We recognize approaching reversals and emerging new trends from far away—and jump in too soon. We often buy before the market finishes tracing a bottom or sell short well before it completes a top. By getting in too early we can end up losing money in trends that are too slow to turn.

What should we do? First of all, you need to become aware that the market time is much slower than your own. Second, consider not putting on a trade when you notice an early reversal signal. A better signal may well emerge later, especially at market tops, which take longer to form than bottoms.

It pays not to be greedy and trade a smaller size. A smaller position is easier to hold while a reversal is taking its sweet time. Be sure to use multiple timeframes for market analysis: this is the essence of Triple Screen, the system we'll review in a future chapter.

The Factor of Five

Most beginners casually pick a timeframe that looks good to them—it can be a daily or a 10-minute chart, or any other—and ignore others. Few are aware of the fact that the market lives in multiple timeframes. It moves simultaneously on monthly, weekly, daily, and intraday charts—often in opposite directions.

The trend may be up on the daily charts but down on the weeklies, and vice versa. Which of them will you follow? And what will you do about the intraday charts, which may well contradict either the weeklies or the dailies? Most traders ignore all timeframes except for their own—until a sudden move from outside of their timeframe hits their account.

Keep in mind that neighboring timeframes are linked by the factor of approximately 5. If you start with a monthly chart and proceed to the weekly, you'll notice that there are 4.5 weeks to a month. As you switch from a weekly to a daily chart, you know that there are 5 trading days to a week. Turning to intraday analysis, you may look at an hourly chart—and there are approximately 5–6 hours to a trading day. Day traders can proceed even further and look at 10-minute charts, followed by 2-minute charts. Each is related to its neighboring timeframes by approximately the factor of five.

The proper way to analyze any market is to review at least two neighboring timeframes. You must always start with the longer timeframe for a strategic view and then switch to the shorter timeframe for tactical timing. If you like using daily charts, you must first examine weekly charts, and if you want to day-trade using 10-minute charts, you first need to analyze hourly charts. This is one of the key principles of the Triple Screen trading system (see Chapter 39).

33. Trading Timeframes

How long do you plan to hold your next trade? Do you think it'll be a year, a week, or an hour? A serious trader plans the expected duration of every trade. Various timeframes offer different opportunities and carry different risks. We can roughly divide all trades into three groups:

1. **Long-term trading or investing**—The expected duration of a position is measured in months, sometimes years.
    - Advantages: requires little day-to-day attention and may lead to spectacular gains.
    - Disadvantage: drawdowns can be intolerably severe.
2. **Swing trading**—The expected duration of a trade is measured in days, sometimes weeks.
    - Advantages: a wealth of trading opportunities, fairly tight risk control.
    - Disadvantage: will miss major trends.
3. **Day-trading**—The expected duration of a trade is measured in minutes, rarely hours.
    - Advantages: great many opportunities, no overnight risk.
    - Disadvantages: demands instant reflexes; transaction costs become a factor.

If you decide to operate in more than one timeframe, consider making those trades in different accounts. This will allow you to evaluate your performance in each timeframe rather than lump together apples and oranges.

Investing

The decision to invest or trade for the long term is almost always based on some fundamental idea. You may recognize a new technological trend or an exciting product that can greatly increase the value of a company. Investing demands a firm conviction and a great supply of patience if you are to hold

that position through the inevitable pullbacks and periods of flat prices. These tough challenges make successful investing extremely hard.

Major trends that are easily seen on long-term charts appear uncertain and foggy in real time, especially when a stock enters a drawdown. When your investment drops 50% or more, wiping out the bulk of paper profits—a common development for long-term positions—few of us have enough conviction and fortitude to continue to hold. Let me illustrate this using an example of Apple Inc. (AAPL), a darling of several bull markets (Figure 33.1).

AAPL survived its near-death experience in 2003, when its battered stock was rumored to be a takeover candidate, and grew to become the highest-capitalized, publicly traded company in the world, before collapsing from that top in 2012. Its uptrend looks grand in retrospect, but ask yourself, honestly, would you have been able to hold though multiple drawdowns, some of them exceeding 50%. Remember that such drawdowns often mark the ends of uptrends.

A sensible way to deal with the challenge of investing is to implement your fundamental idea with the help of technical trading tools. When you decide to buy, check out technical signals to ensure you're getting a relative bargain rather than paying full price. If your investment soars, use technical tools to identify overvalued zones; take your profits there and be ready to repurchase during the inevitable pullbacks. This plan demands a high degree of attention, focus, and perseverance. Figure 33.2 is an example that was taken from my trading diary.

Figure 33.1 AAPL weekly. *(Chart by Stockcharts.com)*

Investing

The tremendous challenges of holding an investment, even a market leader like Apple Inc. (AAPL), can be seen on this 10-year chart:

1. 2003—AAPL collapses below $10. Company's survival in question. Would you buy?
2. 2006—AAPL rallies to $86, then sinks to $51. If you had a thousand shares, would you hold? Would you sell when it got back above $80 and appeared to stall?
3. 2008—AAPL rallies to $202, drops to $115. If you had a thousand shares, showing an $87,000 drawdown, would you hold or sell?
4. 2009—AAPL recovers to $192, sinks to $78, below its previous low. Your drawdown is over 50%. Are you holding or cashing out?

Figure 33.2 F monthly, 26- and 13-months EMA with the Impulse system, Autoenvelope, MACD Lines and MACD-Histogram (12-26-9), and Force Index 13-months EMA with ATR channels. *(Chart by Tradestation)*

Technical Analysis with Fundamentals

1. 2007—Ford was on the ropes when the new CEO arrived—the man who earlier spearheaded saving Boeing. In the heady atmosphere of a bull market, Ford seemed to have a shot at recapturing its $30 high. I saw a false downside breakout coupled with a bullish divergence and bought. I then grimly held through the bear market.
2. 2011—Ford spiked above its monthly channel, which was narrower at that time, tracing a kangaroo tail, while monthly MACD weakened. I took profits.
3. 2011—as monthly prices stabilized in their value zone, I repurchased my position.

Fundamental analysis can help you find a stock that may be worth buying. Use technical analysis to time your entries and exits. Be prepared to buy and

sell more than once during a major uptrend.

Swing Trading

While major trends and trading ranges can last for years, all are punctuated by short-term upswings and downswings. Those moves create multiple trading opportunities, which we can exploit. Many charting examples in this book feature swing trades.

I especially recommend swing trading for beginning and intermediate traders. The more trades you make, the more you learn, provided you manage risk and keep good records. Swing trading teaches you faster than long-term investing, whose lessons take years to complete. Swing trading gives you time to think, unlike day-trading, which demands instant reactions. Day-trading is too fast for beginners.

Short-term swings can be substantial enough to generate meaningful profits, without the gut-wrenching drawdowns of position trades. Swing trades don't require watching the screen all day. In SpikeTrade.com, where hundreds of traders compete, most trades last a few days. Some members carry their trades for weeks and even months, while others hop in and out within hours —but the holding period for most members is measured in days. Swing trading hits the sweet spot among time horizons.

I piggyback one or more of the Spiketrade group's picks almost every week. The chart of HES in Figure 33.3 comes from my diary of one of those trades.

My profit in the HES trade was $ 1.92 per share. You can calibrate the amount of risk you accept and the size of potential profit by deciding how many shares to trade. We'll address this essential question in chapter 50, in the section on the Iron Triangle of risk control.

Figure 33.3 HES daily, 26- and 13-day EMA with 4% envelope, MACD Lines and MACD-Histogram (12-26-9), the Impulse system, and 2-day Force Index. *(Chart by Stockcharts.com)*

A Swing Trade

Professional traders are just as comfortable selling short as buying. The signals are similar but the action quicker—stocks fall twice as fast as they rise.

This chart shows where I shorted the stock of Hess Corporation (HES) as it was tracing a short-term double top, with bearish divergences in all indicators. I covered and took profits, as prices appeared to stall just below the value zone between the two EMAs, while the indicators became oversold.

One of the best learning techniques involves returning to your closed-out trades two months later and replotting their charts. Trading signals that looked foggy when you saw them at the right edge of the screen become clear when you see them in the middle of your chart. Now, with the passage of time, you can easily see what worked and what mistakes you may have made. Creating these follow-up charts teaches you what to repeat and what to avoid in the future. Updating the charts of closed trades turns you into your own instructor.

The chart and text in Figure 33.4 come from SpikeTrade.com. Each week the Spiker who won that week's competition posts a diary of his trade. Different people use different indicators and parameters.

Peter's trade gained almost 11% in three days. Of course, we can't allow ourselves to get intoxicated by such numbers. A beginner looks at them, multiplies them by the number of weeks in a year, and goes crazy throwing his money at the markets. Such spectacular gains are inevitably interspersed with losses. A professional trader carefully manages his money, quickly cuts losing trades and protects his capital to allow his equity to grow.

Figure 33.4 TRQ daily, 22- and 12-day EMA with 11% envelope, MACD Lines and MACD-Histogram (12-26-9), and 20-day RSI. *(Chart by Stockcharts.com)*

A Swing Trade near the Bottom

This trade was submitted by Peter D., a long-term Spiker from the Netherlands. His post was headlined “Fishing near the Lows.”

“Weekly conditions: Indicators don't show much movement. MACD very shallow but positive and RSI slowly improving. Daily: MACD was about to confirm a positive divergence, and so was RSI. Prices dove last week but stopped near support.

"I set the initial entry at $3.02, in line with recent lows. It was hit on Monday morning, which turned out to be one cent above the low for the day and the week. Price closed near the high of the day and continued surging on Tuesday and Wednesday. My target was hit on Wednesday, on the way up. The rest of the day saw some pulling back, but price kept in range to close the week on a relatively high note."

If investing is like hunting the big game, swing trading is like rabbit hunting. If your livelihood depends on hunting, shooting rabbits is a much more reliable way of putting meals on the table. Carefully entering and exiting swing trades, while cautiously managing money, is a realistic way of surviving and prospering in the markets.

Day-Trading

Day-trading means entering and exiting trades within a single market session. Rapid buying and selling in front of a flashing screen demands the highest levels of concentration and discipline. Paradoxically, it attracts the most impulsive and gambling-prone people.

Day-trading appears deceptively easy. Brokerage firms hide customer statistics from the public, but in 2000, state regulators in Massachusetts subpoenaed brokerage house records, which showed that after six months only 16% of day-traders made money.

Whatever gaps you may have in your knowledge or discipline, day-trading will find them fast and hit you hard in your weak spots. In swing trading, you have the luxury of being able to stop and think, but not in day-trading.

The person who is learning to trade is much better off using end-of-day charts. After you grow into a consistently profitable swing trader, you may wish to explore day-trading. You'll use your already developed skills and will only need to adjust to a faster game. A market newbie who stumbles into day-trading is a gift to the pros.

Make sure to write down your action plan for day-trading: what will prompt you to enter or exit, to hold or cut. Be prepared to invest plenty of time: day-trading chews up long hours in front of multiple screens.

Another difficulty of day-trading is that you shoot at much smaller targets. This is reflected in the height of price channels. Elsewhere in this book,

you'll read that a good measure of a trader's performance is the percentage of the channel or an envelope he captures in a trade. Taking 30% or more of a channel's height earns you an A grade, while capturing 10% of that channel earns you a C (see Chapter 55). Let's apply these ratings to several stocks that are popular with day traders. The exact figures will change by the time you read this book, but today I get the following numbers for channel heights on the daily and 5-minute charts:

	Daily Channel	**“A” Trader**	**“C” Trader**	**S-Min Channel**	**“A” Trader**	**“C” Trader**
AAPL	55	16.5	5.5	2.5	0.75	0.2S
AMZN	27	8.1	2.7	2.2	0.66	0.22
MON	7	2.1	0.7	0.6	0.18	0.06

A swing trader who uses daily charts can do very well in these active stocks. He can really clean up if he is an A level trader, but even if he is a C trader, taking only 10% out of a channel, he can stay comfortably ahead of the game while learning to trade. On the other hand, a person who day-trades the very same stocks must be a straight A trader in order to survive. Anything less and his account will be ground up by slippage, commissions, and expenses.

If, after developing a successful track record as a swing trader, you decide to day-trade, you'll be able to use most of the tools and techniques you've already learned. You'll find an example of using Triple Screen in day-trading in Chapter 39.

When a friend who is an Olympic rowing coach taught me to row, he focused on developing the correct stroke. A competent rower always moves his oars exactly the same way, whether it's a leisurely weekend row or the final stretch of a race. What changes are power and speed. The same with day-trading: the technique is the same, but the speed is different. If you learn to swing trade, you can apply your technique to day-trading. And then you can go in reverse, and apply day-trading techniques to swing-trade entries and exits.

Day-trading can be a profitable pursuit, but keep in mind that it's a highly demanding professional game and most definitely not a casual activity for

beginners.

Notes

1. I visited Granville in 200S in Kansas City. Not only did he do all his calculations by hand, he avoided going online, as he was suspicious of pervasive snooping—and that was years before the disclosures of government spying. He disconnected his computer from the Internet until it was time to send out his newsletter. Granville monitored intraday prices by tuning his TV into CNBC with the sound turned off and a towel draped over the upper portion of the screen, so that all he could see was the tape, running along the bottom of his screen.

2. Remember, we're talking about the force of market crowds, not the formula in physics.

3. This cycle was grossly distorted by the Fed's “quantitative easing” following the 2008 debacle, but it's likely to return, once we crawl out of the Great Recession.

PART 6

General Market Indicators

You can use technical indicators reviewed in previous chapters to analyze any trading vehicle: a stock, a future, an index, etc. Such tools as moving averages, MACD, Force index, and others, can provide signals for any ticker in any timeframe. Now we turn to a different group of tools: general market indicators, which analyze the entire market rather than any specific stock. They are worth following because general market trends are responsible for as much as half the movement in individual stocks.

While there are dozens of general market indicators, this is not an encyclopedic review—I'll simply share the tools that help me trade. You may use the same or different tools—select those that appeal to you and test them on your market data. We can trust only those indicators that we have tested.

34. The New High–New Low Index

Stocks that reach their highest level in a year on any given day are the leaders in strength. Stocks that fall to their lowest point for that year on the same day are the leaders in weakness. The New High–New Low Index (NH-NL) tracks the behavior of market leaders by subtracting the number of New Lows from the New Highs. In my experience, NH-NL is the best leading indicator of the stock market.[1]

How to Construct NH-NL

The New High–New Low Index is easy to calculate, using information that appears in many online sources and in major newspapers.

$$\text{NH-NL} = \text{New Highs} - \text{New Lows}$$

Most data services in the United States report the daily numbers of New Highs and New Lows, but it is shocking how loosely they define their data. Some are too narrow and track only the NYSE stocks, ignoring other exchanges. Others are too broad and track everything, including interest rate ETFs. My favorite source of reliable data is www.barchart.com. I take their data, subtract New Lows from New Highs, and plot the result underneath the daily chart of the S&P 500.

The task of constructing NH-NL is harder for traders outside the United States, in countries where such data isn't reported. There you'll need to do a bit of programming. First, run a daily scan of the database of all stocks in your country to find those that have reached the highest high and the lowest low for the year during the day. Once you have those two lists, take the above formula and apply it to the numbers you found.

On the days when there are more new highs than new lows, NH-NL is positive and plotted above the centerline. On the days when there are more new lows than new highs, NH-NL is negative and plotted below the centerline. If the numbers of new highs and new lows are equal, NH-NL is zero. We normally plot the New High–New Low Index as a line, with a horizontal reference line at a zero level.

While I plot NH-NL underneath the S&P 500, keep in mind that it has a much broader reach than the S&P—NH-NL includes data from the NYSE,

AMEX, and NASDAQ, excluding only ETFs, unit investment trusts, closed-end funds, warrant stocks, and preferred securities. The chart of the S&P 500 is there simply for a comparison.

Crowd Psychology

A stock appears on the list of new highs when it's the strongest it's been in a year. It means that a herd of eager bulls is chasing its shares. A stock appears on the list of new lows when it's the weakest it's been in a year, showing that a crowd of aggressive bears is selling its shares.

The New High–New Low Index compares the numbers of the strongest and the weakest stocks on the exchange. It reveals the balance of power between the leaders in strength and the leaders in weakness.

You can visualize all stocks on the New York Stock Exchange, the NASDAQ, or any other exchange as soldiers in a regiment. The new highs and new lows are their officers. The new highs are the officers who lead an attack uphill. The new lows are the officers who are deserting and running downhill.

The quality of leadership is a key factor in any conflict. When I was in officer training, they kept telling us that there are no bad soldiers, only bad officers. The New High–New Low Index shows whether more officers are leading an attack uphill or deserting downhill. Where the officers lead, soldiers follow. The broad indexes, such as the S&P 500, tend to follow the trend of NH-NL (Figure 34.1).

Figure 34.1 S&P 500 daily, 26- and 13-day EMAs, Autoenvelope, NH-NL daily. (*Chart by TradeStation*)

NH-NL—Daily Chart, Yearly Look-Back

This chart tracks daily NH-NL during a mostly bullish year in the stock market. Still, every bullish trend gets interrupted by pullbacks. Bearish deterioration patterns of NH-NL, marked here by diagonal red arrows, warn you of coming declines. These signals emerge because officers start shifting towards the rear before the soldiers retreat.

Declines end and rallies begin when NH-NL rallies from negative into positive territory, marked here by purple circles. Those signals work especially well when the S&P is oversold, i.e., near its lower channel line. As always, trading messages are especially strong when independent signals confirm each other.

When NH-NL rises above its centerline, it shows that the bullish leadership is dominant. When NH-NL falls below its centerline, it shows that bearish leadership is in charge. If the market rallies to a new high and NH-NL climbs to a new peak, it shows that bullish leadership is growing and the uptrend is likely to continue. If the market rallies but NH-NL shrinks, it

shows that the leadership is becoming weak and the uptrend is in danger. A regiment whose officers are starting to desert is likely to retreat.

A new low in NH-NL shows that the downtrend is well led and likely to persist. If officers are running faster than the men, the regiment is likely to be routed. If stocks fall but NH-NL turns up, it shows that officers are no longer running. When officers regain their morale, the whole regiment is likely to rally.

Trading Rules for NH-NL

Traders need to pay attention to three aspects of NH-NL: the level of NH-NL above or below its centerline, the trend of NH-NL, and divergences between the patterns of NH-NL and prices.

NH-NL Zero Line

The position of NH-NL in relation to its centerline shows whether bulls or bears are in control. When NH-NL is above its centerline, it shows that more market leaders are bullish than bearish and it is better to trade from the long side. When NH-NL is below its centerline, it shows that bearish leadership is stronger, and it's better to trade from the short side. NH-NL can stay above its centerline for months at a time in bull markets and below its centerline for months in bear markets.

If NH-NL stays negative for several months but then rallies above its centerline, it signals that a bull move is likely to begin. It is time to look for buying opportunities, using oscillators for precise timing. If NH-NL stays positive for several months but then falls below its centerline, it shows that a bear move is likely to begin. It is time to look for shorting opportunities using oscillators for precise timing.

NH-NL Trends

When the market rallies and NH-NL rises, it confirms uptrends. When NH-NL declines together with the market, it confirms downtrends.

1. A rise in NH-NL shows that it's safe to hold long positions and add to them. If NH-NL declines while the broad market stays flat or rallies, it is time to take profits on long trades. When NH-NL falls below zero, it shows that bearish leadership is strong and it's safe to hold short

positions and even add to them. If the market continues to fall but NH-NL rises, it shows that the downtrend is not well led—it's time to cover shorts.

2. If NH-NL rises on a flat day, it flashes a bullish message and gives a buy signal. It shows that officers are going over the top while the soldiers are still crouching in their foxholes. When NH-NL falls on a flat day, it gives a signal to sell short. It shows that officers are deserting while the troops are still holding their positions. Soldiers aren't stupid—if their officers start running away, they will not stay and fight.

NH-NL Divergences

If the latest market peak is confirmed by a new high of NH-NL, that rally is likely to continue, even if punctuated by a decline. When a new market low is accompanied by a new low in NH-NL, it shows that bears are well led and the downtrend is likely to persist. On the other hand, divergences between the patterns of NH-NL and broad market indexes show that leaders are deserting and the trends are likely to reverse.

1. If NH-NL traces a lower peak while the market rallies to a new high, it creates a bearish divergence. It shows that bullish leadership is weakening even though the broad market is higher. Bearish divergences often mark the ends of uptrends, but pay attention to the height of the second peak. If it is only slightly above zero, in the low hundreds, then a big reversal is probably at hand and it's time to go short. If, on other hand, the latest peak is in the high hundreds, it shows that the upside leadership is strong enough to prevent the market from collapsing.
2. If the market declines to a new low, but NH-NL traces a shallower bottom than its previous decline, it creates a bullish divergence. It shows that bearish leadership is shrinking. If the latest low of NH-NL is shallow, in the low hundreds, it shows that the bearish leadership is exhausted and a major upside reversal is near. If the latest low sinks deep, then bears still have some strength, and the downtrend may pause but not reverse. Keep in mind that bullish divergences at stock market bottoms tend to develop faster than bearish divergences at market tops: buy fast and sell slowly.

NH-NL in Multiple Timeframes and Look-Back Periods

Markets move simultaneously in different timeframes. My original work on the NH-NL focused on the daily charts with a one-year look-back period—counting stocks that have reached a new high or a new low for their latest 52-week range. I have since added several dimensions for a deeper understanding of this key indicator.

Weekly NH-NL

The weekly NH-NL helps confirm major stock market trends and identify major reversals. I build it from the daily data of barchart.com, mentioned above, by running a five-day moving total. I plot the result underneath a weekly chart of the S&P 500.

The weekly NH-NL gives its most important signals when it reaches extreme levels and also by divergences. To understand its logic, keep in mind how the weekly NH-NL is constructed. For example, if the weekly NH-NL rises to a +1,500 level, it means that in each of the past five trading days there were on average 300 more New Highs than New Lows. It takes a period of sustainable bullishness or bearishness to push the weekly NH-NL to an extreme.

These are the most important signals of weekly NH-NL:

- When it drops below minus 4,000 and then rallies above that level, it delivers major buy signals.
- When the weekly NH-NL rises above plus 2,500, it confirms bull markets.
- When the tops or bottoms of weekly NH-NL diverge from price patterns, they signal important reversals.

A drop below −4,000 reflects an unsustainable market panic. To fall that low, the market has to deliver an average of 800 more daily New Lows than New Highs for five days in a row. Such massive panic is not going to last. When the weekly NH-NL rises above −4,000, it flashes a buy signal I call a Spike. It's so powerful and effective in both bull and bear markets that I named our SpikeTrade group after it. This signal misfired only once in several decades, as you'll see on the chart in Figure 34.2.

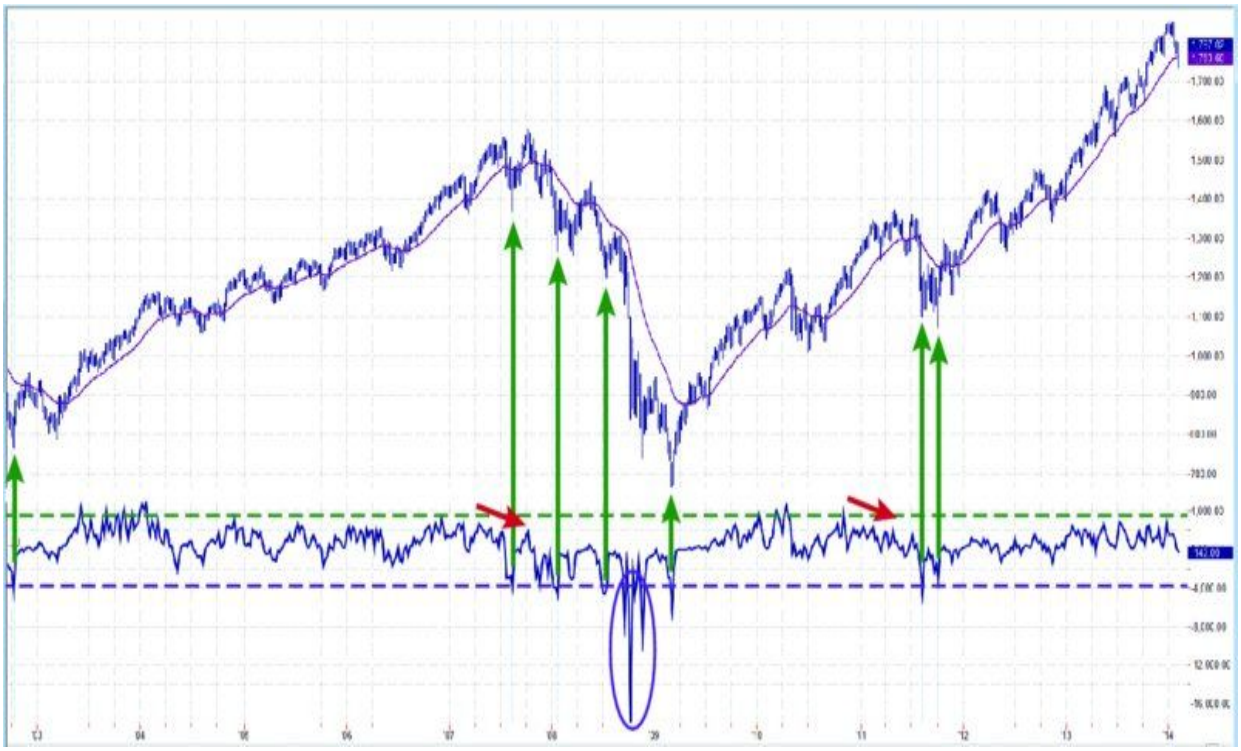


Figure 34.2 S&P 500 weekly, 26-week EMA, NH-NL weekly. Green line at +2,500, purple line at −4,000. (*Chart by TradeStation*)

NH-NL—Weekly Chart.

When the weekly NH-NL falls below −4,000 and then rises above that level, it nails important bottoms, marked here with vertical green arrows. This chart covers 11 years—the signal works in bull and bear markets. There was only one exception—in October and November 2008, during the worst bear market of a century (marked by a purple oval). Let this serve as a reminder that no market signal works 100% of the time, making risk management essential for survival and success.

Red diagonal arrows mark major bearish divergences. Weekly NH-NL touching the +2,500 level confirms bull markets and calls for higher prices ahead, even if interrupted by a correction.

When the weekly NH-NL rises to the +2,500 level, it confirms bull markets. This indicator never rises this high during bear market rallies. When you see it above that level, you know you're in a bull market, with higher prices likely ahead.

The 65-day and 20-day NH-NL

One of the great innovations in the New High–New Low analysis in recent years was the addition of two new look-back windows: a 20-day and a 65-day. While the regular daily NH-NL compares each day's high and low to the high-low range for the preceding year, a 20-day NH-NL compares it only to the preceding month and a 65-day NH-NL to the preceding quarter. These shorter-term views of the NH-NL are useful for short-term timing.

These two new time windows deliver more sensitive signals than the standard year-long NH-NL. The logic is simple: before a stock reaches a new high for the year, it must first make a new high for the month and then for the quarter. If a stock has been in a downtrend, it may take a long time to recover and reach a new yearly high, but it can reach monthly and quarterly highs much sooner.

In addition to the usual signals, such as trends and divergences, a very sharp short-term buy signal occurs when the 20-day NH-NL drops below minus 500 and then rallies above that level. It shows that the market has touched and rejected a short-term bearish extreme, and afterwards it usually launches a short-term rally. We call this a “Spike bounce” signal (see Chapter 54).

Tracking market leaders with the help of NH-NL helps improve timing. There are two ways to utilize the New High–New Low signals. First, since individual stocks largely depend on broad market trends, we can use NH-NL signals to decide when to buy or sell our stocks. Furthermore, we can use NH-NL signals to trade vehicles that track the broad market, such as the S&P e-mini futures.

35. Stocks above 50-Day MA

This broad stock market indicator is based on the key concepts regarding prices and moving averages (Figure 35.1). Each price represents a momentary consensus of value among market participants, while a moving average represents an average consensus of value during its time window. This means that when a stock trades above its MA, the current consensus of value is above average—bullish. When a stock trades below its MA, the current consensus of value is below average—bearish.

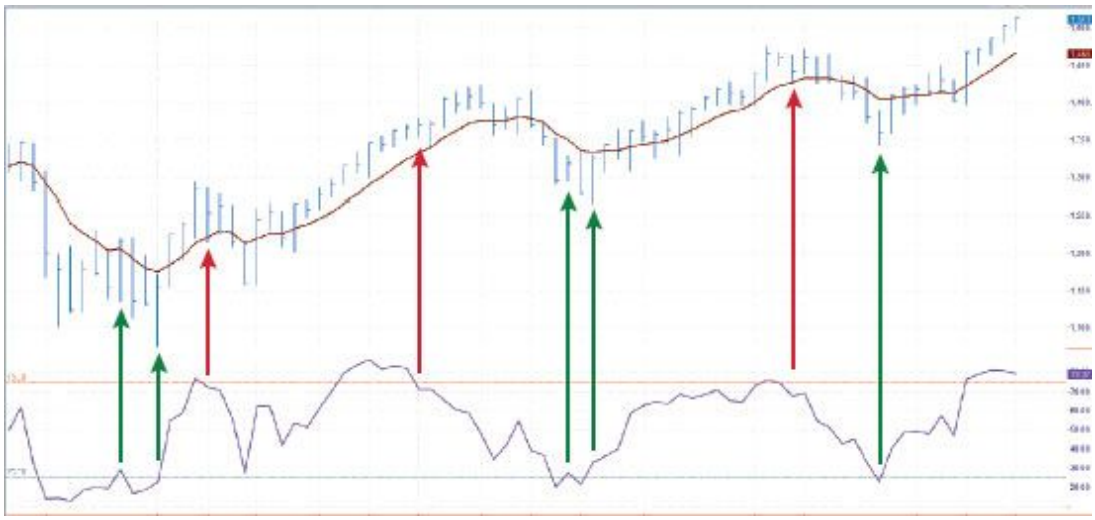


Figure 35.1 S&P 500 weekly and 26-week MA; Stocks above 50 MA with reference lines at 75% and 25%. (*Chart by TradeStation*)

Stocks above 50-Day MA

When the "stocks above their 50-day MA" indicator reaches an extreme—above 75% or below 25% and then moves away from that level, it shows that the intermediate-term trend has reached a likely turning point. A reversal of this indicator flashes a signal for the entire market: buy when it turns up and sell when it turns down. In the latter part of 2013, as the market started going up with almost no pullbacks, buy signals from upside reversals began to occur at levels higher than 25%. These signals don't mark every reversal—no indicator does—but when it flashes its signal, we had better pay attention.

When the market is trending higher, the percentage of stocks above their moving averages keeps growing. In a broad downtrend, the number of stocks

above their MAs keeps shrinking.

This indicator tracks all stocks traded on the New York Stock Exchange, American Exchange, and NASDAQ and calculates how many of them trade above their moving averages. It plots that percentage as a line that fluctuates between 0% and 100%. We can use the pattern of this line to confirm market trends and anticipate reversals.

The indicator for tracking the number of stocks above their 50-day MAs is included in many software packages. I like to view it on a weekly chart, where it helps catch intermediate reversals—market turns that augur in trends that last anywhere from several weeks to several months. You don't need to look at this indicator daily, but it can be an important part of weekend homework.

In theory, the highest possible reading of this indicator would be 100%, if all stocks rallied above their MAs. Its lowest possible reading of 0% would occur if all stocks were to fall below their MAs. In practice, only exceptional market moves swing it near the 90% or 10% extremes. Normally, this indicator tends to top out near 75% and bottom out near 25%. I draw two reference lines on its chart at 75% and 25% and start looking for the market turn as this indicator approaches those levels.

The percentage of stocks above their 50-day MA gives its trading signals not by reaching any certain levels but rather by reversing near those levels. It signals the completion of a top by rising to or above the upper reference line and then sinking below that line. It signals that a bottom has been formed when it falls below or even near the lower reference line and then turns up.

Notice that the tops of this indicator tend to be broad, while its bottoms are sharper. Tops are formed by greed, which is a happier, longer-lasting emotion. Bottoms are formed by fear—a more intense and shorter-lived emotion.

While some of this indicator's signals are right on time in catching reversals, others mark only temporary pauses in major trends. Let this serve as a reminder never to rely on a single indicator for trading decisions. Use multiple tools: when they confirm each other's signals, they reinforce one another.

36. Other Stock Market Indicators

Only a handful of general market indicators have stood the harsh test of time. Many that used to be popular in previous decades have been swept away by the flood of new trading vehicles. The New High–New Low Index and Stocks Above 50-day MA, reviewed above, continue to work because of their clear logic. Several other indicators are listed below. Whatever tools you choose, be sure to understand how they work and what exactly they measure. Select a few and track them on a regular basis, until you come to trust their signals.

Advance/Decline

The Advance/Decline line (the A/D line) tracks the degree of mass participation in rallies and declines. Each day it adds up the number of stocks that closed higher and subtracts the number of stocks that closed lower.

While the Dow Jones Industrials track the behavior of the generals and the New High–New Low Index focuses on the officers, the A/D line shows whether soldiers are following their leaders. A rally is more likely to persist when the A/D line rises to a new high, while a decline is likely to deepen if A/D falls to a new low in step with the Dow.

The A/D line is based on the day's closing prices for each stock at any exchange: take the number of advancing stocks, subtract the number of declining stocks, and ignore unchanged stocks. The result will be positive or negative, depending on whether more stocks advanced or declined during the day. For example, if 4,000 stocks were traded, 2,600 advanced, 900 declined, and 500 were unchanged, then Advance/Decline equals +1,700 (2,600−900). Add each day's Advance/Decline figures to the previous day's total to create a cumulative A/D line (Figure 36.1).

Figure 36.1 S&P 500 daily and the Advance/Decline line. (*Chart by Stockcharts.com*)

Advance/Decline Line

The turns of this indicator usually coincide with price turns, but occasionally precede them. This ability to give early warnings makes A/D line worth following. In area A, prices are scratching the bottom and make a new low, while the uptrend of the A/D line calls for a rally. In area B, the opposite occurs—prices press higher, while a downturn of the A/D line calls for a decline. In area C, prices continue to decline, while the A/D line turns up and calls for a rally. Those warnings don't occur at every turning point.

Traders should watch for new peaks and valleys in the A/D line rather than its absolute levels, which depend on its starting date. If a new high in the stock market is accompanied by a new high of the A/D line, it shows that the rally has broad support and is likely to continue. Broadly based rallies and declines have greater staying power. If the stock market reaches a new peak, but the A/D line reaches a lower peak than during the previous rally, it shows that fewer stocks are participating, and the rally may be near its end. When the market falls to a new low but the A/D line traces a shallower bottom than during the previous decline, it shows that the decline is narrowing down and the bear move is nearing an end. These signals tend to precede reversals by weeks if not months.

The **Most Active Stocks indicator** (MAS) is an Advance/Decline line of the 15 most active stocks on the New York Stock Exchange. It used to be listed daily in many newspapers. Stocks appeared on this list when they caught the public's eye. MAS was a big money indicator—it showed whether big money was bullish or bearish. When the trend of MAS diverged from the price trends, the market was especially likely to reverse.

Hardly anyone today uses an indicator called **TRIN**, which was important enough to have its own chapter in the original *Trading for a Living*. Very few people track another formerly popular indicator called **TICK**. Old stock market books are full of fascinating indicators, but you have to be very careful using them today. Changes in the market over the years have killed many indicators.

Indicators based on the volume of **low-priced stocks** lost their usefulness when the average volume of the U.S. stock market soared and the Dow rose tenfold. The **Member Short Sale Ratio** and the **Specialist Short Sale Ratio** stopped working after options became popular. Member and specialist short sales are now tied up in the intermarket arbitrage. **Odd-lot** statistics lost value when conservative odd-lotters bought mutual funds. The **Odd-lot Short Sale Ratio** stopped working when gamblers discovered puts.

37. Consensus and Commitment Indicators

Most private traders keep their opinions to themselves, but financial journalists, letter writers, and bloggers spew them forth like open hydrants. Some writers may be very bright, but the financial press as a whole has a poor record of market timing.

Financial journalists and letter writers tend to overstay trends and miss turning points. When these groups become intensely bullish or bearish, it pays to trade against them.

It's “monkey see, monkey do” in the publishing business, where a journalist's or an advisor's job may be endangered by expressing an opinion that differs too sharply from his group. Standing alone feels scary, and most of us like to huddle. When financial journalists and letter writers reach a high degree of bullish or bearish consensus, it's a sign that the trend has been going on for so long that a reversal is near.

Consensus indicators, also called contrary opinion indicators, are not suitable for precision timing, but they draw attention to the fact that a trend is near its exhaustion level. When you see that message, switch to technical indicators for more precise timing of a trend reversal.

A trend can continue as long as bulls and bears remain in conflict. A high degree of consensus precedes reversals. When the crowd becomes highly bullish, get ready to sell, and when it becomes strongly bearish, get ready to buy. This is the contrary opinion theory, whose foundations were laid by Charles Mackay, a Scottish barrister. His classic book, *Extraordinary Popular Delusions and the Madness of Crowds* (1841) describes the infamous Dutch Tulip Mania and the South Seas Bubble in England. Humphrey B. Neill in the United States applied the theory of contrary opinion to stocks and other financial markets. In his book, *The Art of Contrary Thinking*, he made it clear why the majority must be wrong at the market's turning points: prices are established by crowds, and by the time the majority turns bullish, there aren't enough new buyers to support a bull market.

Abraham W. Cohen, an old New York lawyer whom I met in the early 1980s, came up with the idea of polling market advisors and using their responses as a proxy for the entire body of traders. Cohen was a skeptic who

spent many years on Wall Street and saw that advisors as a group performed no better than the market crowd. In 1963, he established a service called *Investors Intelligence* for tracking letter writers. When the majority of them became bearish, Cohen identified a buying opportunity. Selling opportunities were marked by strong bullishness among letter writers. Another writer, James H. Sibbet, applied this theory to commodities, setting up an advisory service called *Market Vane*.

Tracking Advisory Opinion

Letter writers follow trends out of fear of losing subscribers by missing major moves. In addition, bullishness helps sell subscriptions, while bearish comments turn off subscribers. Even in a bear market, we rarely see more bears than bulls among advisors for more than a few weeks at a time.

The longer a trend continues, the louder the letter writers proclaim it. They are most bullish at market tops and most bearish at market bottoms. When the mass of letter writers turns strongly bullish or bearish, it's a good idea to look for trades in the opposite direction.

Some advisors are very skilled at doubletalk. The man who speaks from both sides of his mouth can claim that he was right regardless of what the market did, but editors of tracking services have plenty of experience pinning down such lizards.

When the original *Trading for a Living* came out, only two services tracked advisory opinions: *Investors Intelligence* and *Market Vane*. In recent years, there has been an explosion of interest in behavioral economics, and today many services track advisors. My favorite resource is SentimenTrader.com, whose slogan is “Make emotion work for you instead of against you.” Jason Goepfert, its publisher, does a solid job of tracking mass market sentiment.

Signals from the Press

To understand any group of people, you must know what its members crave and what they fear. Financial journalists want to appear serious, intelligent, and informed; they are afraid of appearing ignorant or flaky. That's why it's normal for them to straddle the fence and present several sides of every issue. A journalist is safe as long as he writes something like “monetary policy is about to push the market up, unless unforeseen factors push it down.”

Internal contradiction is the normal state of affairs in financial journalism[2]. Most financial editors are even more cowardly than their writers. They print contradictory articles and call this “presenting a balanced picture.”

For example, an issue of a major business magazine had an article headlined “The Winds of Inflation Are Blowing a Little Harder” on page 19. Another article on page 32 of the same issue was headlined “Why the Inflation Scare Is Just That.” It takes a powerful and lasting trend to lure journalists and editors down from their fences. This happens only when a tide of optimism or pessimism sweeps up the market near the end of a major trend. When journalists start expressing strongly bullish or bearish views, the trend is ripe for a reversal.

This is why the front covers of major business magazines serve as contrarian indicators. When a leading business magazine puts a bull on its cover, it's usually a good time to take profits on long positions, and when a bear graces the front cover, a bottom cannot be too far away.

Signals from Advertisers

A group of three or more ads touting the same “opportunity” in a major newspaper or magazine warns of an imminent top. This is because only a well-established uptrend can break through the inertia of several brokerage firms. By the time all of them recognize a trend, come up with trading recommendations, produce ads, and place them in a newspaper, that trend is very old indeed.

The ads on the commodities page of *The Wall Street Journal* appeal to the bullish appetites of the least-informed traders. Those ads almost never recommend selling; it is hard to get amateurs excited about going short. You'll never see an ad for an investment when its price is low. When three or more ads on the same day tout gold or silver, it is time to look at technical indicators for shorting signals.

A more malignant breed of promoters appeared on the scene in the past decade: thanks to the Internet, “pump and dump” operators have migrated online. The scammers touting penny stocks know that they need to wait for an uptrend to hook their victims. Whenever a higher than usual number of promo pitches starts showing up in my spam filter, the top can't be too far away (Figure 37.1).

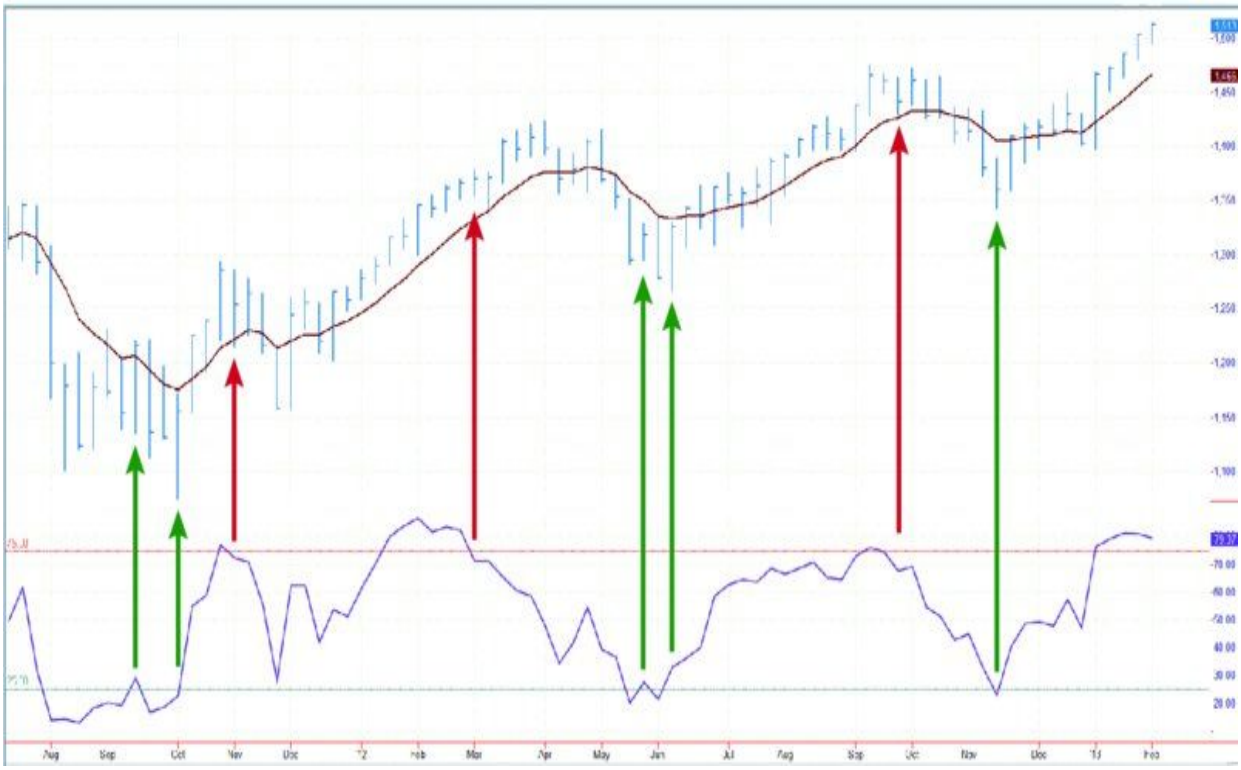


Figure 37.1 Monthly total dollar value of OTC stocks. (*Courtesy SentimenTrader.com*)

Money pours into penny stocks when the market is up, dries up when it is down. This is reflected in the monthly reports of penny stock volume at the NASDAQ. After markets have hit new highs and the news is good, volume often spikes up for these "lottery ticket" stocks. When the stock market hits the skids, their volume dries up.

Commitments of Futures Traders

Government agencies and exchanges collect data on buying and selling by various groups of traders and publish summary reports of their positions. It pays to trade with the groups that have a track record of success and against those with track records of persistent failure.

For example, the Commodity Futures Trading Commission (CFTC) reports long and short positions of hedgers and big speculators. Hedgers—the commercial producers and consumers of commodities—are the most successful market participants. The Securities and Exchange Commission (SEC) reports purchases and sales by corporate insiders. Officers of publicly traded companies know when to buy or sell their shares.

Positions of large futures traders, including hedge funds, are reported to the CFTC when their sizes reach the so-called **reporting levels**. At the time of this writing, if you are long or short 250 contracts of corn or 200 contracts of gold, the CFTC classifies you as a big speculator. Brokers report those positions to the CFTC, which compiles the data and releases summaries on Fridays.

The CFTC also sets up the maximum number of contracts a speculator is allowed to hold in any given market— these are called **position limits.** Those limits are set to prevent very large speculators from accumulating positions that are big enough to bully the markets.

The CFTC divides all market participants into three groups: commercials, large speculators, and small speculators. **Commercials**, also known as **hedgers**, are firms or individuals who deal in actual commodities in the normal course of their business. In theory, they trade futures to hedge business risks. For example, a bank trades interest rate futures to hedge its loan portfolio, while a food processing company trades wheat futures to offset the risks of buying grain. Hedgers post smaller margins and are exempt from speculative position limits.

Large speculators are those whose positions have reached reporting levels. The CFTC reports buying and selling by commercials and large speculators. To find the positions of **small traders**, you need to take the open interest and subtract from it the holdings of the first two groups.

The divisions between hedgers, big speculators, and small speculators are somewhat artificial. Smart small traders grow into big traders, dumb big traders become small traders, and many hedgers speculate. Some market participants play games that distort the CFTC reports. For example, an acquaintance who owns a brokerage firm sometimes registers his wealthy speculator clients as hedgers, claiming they trade stock index and bond futures to hedge their stock and bond portfolios.

The commercials can legally speculate in the futures markets using inside information. Some of them are big enough to play futures markets against cash markets. For example, an oil firm may buy crude oil futures, divert several tankers, and hold them offshore in order to tighten supplies and push up futures prices. They can take profits on long positions, go short, and then deliver several tankers at once to refiners in order to push crude futures

down a bit and cover shorts. Such manipulation is illegal, and most firms hotly deny that it takes place.

As a group, commercials have the best track record in the futures markets. They have inside information and are well-capitalized. It pays to follow them because they are successful in the long run. Big speculators used to be successful wealthy individuals who took careful risks with their own money. That has changed, and today most big traders are commodity funds. These trend-following behemoths do poorly as a group. The masses of small traders are the proverbial “wrong-way Corrigans” of the markets.

It is not enough to know whether a certain group is short or long. Commercials often short futures because many of them own physical commodities. Small traders are usually long, reflecting their perennial optimism. To draw valid conclusions from the CFTC reports, you need to compare current positions to their historical norms.

Legal Insider Trading

Officers and investors who hold more than 5 percent of the shares in a publicly traded company must report their buying and selling to the Securities and Exchange Commission. The SEC tabulates insider purchases and sales, and releases this data to the public.

Corporate insiders have a long record of buying stocks when they're cheap and selling them high. Insider buying emerges after severe market drops, and insider selling accelerates when the market rallies and becomes overpriced.

Buying or selling by a single insider matters little: an executive may sell shares to meet major personal expenses or he may buy them to exercise stock options. Analysts who researched legal insider trading found that insider buying or selling was meaningful only if more than three executives or large stockholders bought or sold within a month. These actions reveal that something very positive or negative is about to happen. A stock is likely to rise if three insiders buy in one month and to fall if three insiders sell within a month.

Clusters of insider buying tend to have a better predictive value than clusters of selling. That's because insiders are willing to sell a stock for many reasons (diversification, buying a second home, sending a kid to college) but they are

willing to buy for one main reason—they expect their company's stock to go up.

Short Interest

While the numbers of futures and options contracts held long and short is equal by definition, in the stock market there is always a huge disparity between the two camps. Most people, including professional fund managers, buy stocks, but very few sell them short.

Among the data reported by exchanges is the number of shares being held short for any stock. Since the absolute numbers vary a great deal, it pays to put them into a perspective by comparing the number of shares held short to that stock's float (the total number of publicly owned shares available for trading). This number, "**Short Percent of Float**," tends to run about one or two percent. Another useful way to look at short interest is by comparing it to the average daily volume. By doing this, we ask a hypothetical question: if all shorts decided to cover, while all other buyers stood aside and daily volume remained unchanged, how many days would it take for them to cover and bring short interest down to zero? This "**Days to Cover**" number normally oscillates between one and two days.

When planning to buy or short a stock, it pays to check its Short Percent of Float and Days to Cover. If those are high, they show that the bearish side is overcrowded. A rally may scare those bears into panicky covering, and send the stock sharply higher. That would be good for bulls but bad for bears.

Fear is a stronger emotion than greed. Bulls may look for bargains but try not to overpay, while squeezed bears, facing unlimited losses, will pay any price to cover. That's why short-covering rallies tend to be especially sharp.

Whenever you look for a stock to buy, check its Short Percent of Float and Days to Cover. The usual, normal readings don't provide any great information, but the deviations from the norm often deliver useful insights (Figure 37.2).

Apple Incorporated	$ 534.97	Green Mountain Coffee Roasters	$ 119.74
AAPL	-1.00	GMCR	0.34
Daily Short Sale Volume	view	Daily Short Sale Volume	view
Short Interest (Shares Short)	16,538,900	Short Interest (Shares Short)	32,931,300
Days To Cover (Short Interest Ratio)	0.9	Days To Cover (Short Interest Ratio)	15.1
Short Percent of Float	1.86 %	Short Percent of Float	25.76 %

Figure 37.2 AAPL and GMCR shorting data. (*Source: Shortsqueeze.com*)

Short Interest and Days to Cover

Compare short interest data for two popular stocks on the day I'm editing this chapter. “Short Percent of Float” is 1.86% for Apple, Inc. (AAPL), but nearly 26% for Green Mountain Coffee Roasters, Inc. (GMCR). “Days to Cover” are 0.9 for AAPL but over 15 for GMCR. These numbers reflect much more aggressive shorting of GMCR. Not to forget, each and every one of those shorts at some point will need to buy in order to cover his short position.

Perhaps savvy shorts know something very bad about GMCR, but what if its stock rallies even a little? Many bears will run for cover, and as they scramble to cover shorts, the stock may soar. Whatever its long-term prospects, it could be sent flying in the near term.

High shorting numbers mark any stock as a dangerous short. By extension, if your indicators suggest buying a stock, its high short interest becomes an additional positive factor—there is more fuel for a rally. It makes sense for swing traders to include the data on shorting when selecting which of several stocks to buy or sell short. I always review these numbers when working up a potential trade.

Notes

1. In 2012, I wrote an e-book with Kerry Lovvorn on the New High–New Low Index. We publish nightly updates on its signals on SpikeTrade.com.

2. And not only journalism: in 2013 three academicians shared a Nobel Prize in economics. The work of one of them showed that the market was efficient and couldn't be timed; the work of another showed that the market was irrational and could be timed. Take your pick and wait for next year's prize.

PART 7

Trading Systems

A system is a set of rules for finding, entering, and exiting trades. Every serious trader has one or more systems. Compare this to a surgeon who has systems for performing operations. He doesn't waste time and energy deciding whether to order anesthesia, where to make the cut, or how to find the sick organ. He follows a well-established routine, which leaves him free to think about strategic issues, finesse his technique, or deal with any complications.

Some people use strictly defined systems that leave very little room for personal judgment—we call them mechanical traders. Others use systems that leave plenty of room for personal decisions—we call them discretionary traders. There is a very thoughtful discussion on matching one's personality type to various trading styles in Richard Weissman's book *Mechanical Trading Systems*. Whatever approach you take, the key advantage of any system is that you design it when the markets are closed and you feel calm. A system becomes your anchor of rational behavior amidst the turbulence of the market.

It goes without saying that a proper system is written down. This needs to be done because it's easy to forget some essential steps when stressed by live markets. Dr. Atul Gawande in his remarkable book *The Checklist Manifesto* makes a convincing case for using checklists to raise performance levels in a large variety of demanding endeavors, from surgery and construction to trading.

A mechanical trader develops a set of rules, back-tests them on historical data, and then puts his system on autopilot. Going forward, his software starts flashing orders for entries, target, and stops, and a mechanical trader is supposed to place them exactly as shown. Whether he'll stick to his plan or

attempt to tweak or override those signals is another story, but that's how the system is supposed to work.

An amateur feels relieved that a mechanical system, either his own or purchased from a vendor, will relieve him from the stress of decision making. Unfortunately, market conditions keep changing, and mechanical systems eventually get out of gear and start losing money. The market is not a mechanical entity that follows the laws of physics. It is a huge crowd of people acting in accordance with imperfect laws of mass psychology. Mechanical methods can help, but trading decisions must take psychology into account.

A professional trader with a mechanical system continues to monitor its performance like a hawk. He knows the difference between a normal drawdown and a period when a system goes out of gear and has to be shelved. A professional trader can afford to use a mechanical system precisely because he is capable of discretionary trading! A mechanical system is an action plan, but some degree of judgment is always required, even with the best and most reliable plans.

A discretionary trader approaches each day in the markets afresh. He tends to examine more factors than a mechanical trader, weigh them differently at different times, and be more attuned to changes in current market behavior. A good discretionary system, while giving you plenty of freedom, includes several inviolate rules, especially in the area of risk management.

Both approaches have pluses and minuses. On the plus side, mechanical trading can be less emotionally tense. You build your system, turn it on, and go about your life without watching every tick. On the minus side, these living and breathing markets have a sneaky way of changing their tunes and behaving differently from how they did when you built your system.

The main plus of discretionary trading is the openness to fresh opportunities. Its biggest minus is that people's judgment tends to slip under stress, when they become excited by greed or frightened by sharp moves.

In my experience, mechanical traders tend to deliver more steady results, but the most successful traders use discretionary methods. Your choice is likely to depend on your temperament. That's how we make some of our most important decisions in life—where to live, what career to pursue, whom to marry. Our key choices stem from the innermost core of our personalities

rather than rational thought. In trading, cooler and more obsessional people tend to gravitate toward mechanical trading, while the more swashbuckling types turn to discretionary trading.

Paradoxically, at the high end of performance, these two approaches begin to converge. Advanced traders combine mechanical and discretionary methods. For example, a friend who is a died-in-the-wool mechanical trader uses three systems in his hedge fund but keeps rebalancing capital allocated to each of them. He shifts millions of dollars from System A to System B or C, and back again. In other words, his discretionary decisions augment his systematic trading. I am a discretionary trader, but follow several strict rules that prohibit me from buying above the upper channel line, shorting below the lower channel line, or putting on trades against the Impulse system (described below). These mechanical rules reduce the number of bad discretionary trades.

Much of this book deals with discretionary trading, but you can use the tools described in it for mechanical trading. I wrote this book to help both types of traders.

38. System Testing, Paper Trading, and the Three Key Demands for Every Trade

Before trading real money with a system, you need to test it, whether you developed it yourself or bought it from a vendor. This can be done in one of two ways. One is backtesting: apply your system's rules to a stretch of historical data, usually several years' worth. The other is forward-testing: trade small positions with real money. Serious traders begin with **backtesting**, and if its results look good, switch to **forward-testing**; if that works well, they gradually increase position size.

Looking at printouts of historical results is a nice start, but don't let good numbers lull you into a false sense of security. The profit-loss ratio, the longest winning and losing streaks, the maximum drawdown, and other parameters may appear objective, but past results don't guarantee the system will hold up in the real world of trading.

You may see a very nice printout, but what if, once you begin to trade real money, that system delivers five losses in a row? Nothing in your paper testing will have prepared you for that, but it happens all the time. You grit your teeth and put on another trade. Another loss. Your drawdown is deepening, and then the system flashes a new signal. Will you put on the next trade? Suddenly, an impressive printout looks like a very thin reed on which to hang the future of your account.

There is a cottage industry of programmers who back-test systems for a fee. Some traders, too suspicious to disclose their “sure-fire methods,” spend months learning to use testing software. In the end, only one kind of backtesting prepares you to trade—manual testing. It is slow, time-consuming, and cannot be automated, but it's the only method that comes close to modeling real decision making. It consists of going through historical data one day at a time, scrupulously writing down your trading signals for the day ahead, and then clicking one bar forward and recording new signals and trades for the next day.

Begin by downloading daily price and volume data for your trading vehicle for a minimum of two years (for futures you may use continuous contracts). Open a chart and, without looking, swing immediately to its very beginning. Open your spreadsheet, write down your system's rules at the top of the

page, and create columns for dates, prices, and signals. Open two windows in your analytic program—one for your weekly chart and its indicators, the other for the daily chart. The two most important keyboard keys for testing are and because they let you switch between windows and programs.

As you click forward, one day at a time, trends and trading ranges will slowly unfold and challenge you. At that point, you'll be doing much more than testing a set of rules. Moving ahead one day at a time will test and improve your decision-making skills. This **one-bar-at-a-time testing** is vastly superior to what you can get from backtesting software.

How will you deal with gap openings, when the market leaps above your buy level or drops below your stop at the opening bell? What about limit moves in futures? Clicking forward one day at a time and writing down your signals and decisions will get you as close to real trading as you can without risking cash. It'll keep you focused on the raw right edge of the market. You'll never get that from a neat printout of a system test. Manual testing will improve your ability not only to understand the markets but to make decisions.

If one-bar-at-a-time testing shows positive results, start trading small positions with real money. These days, with brokerage commissions as low as $1 for buying or selling 100 shares, you can test your indicators and systems while risking tiny amounts. Be sure to keep good records, and if your real-money results continue positive, start increasing the size of your trades. Do it in steps, all the way up to your normal trade size.

Paper Trading

Paper trading means recording your buy and sell decisions and tracking them like real trades, but with no money at risk. Beginners may start out paper trading, but most people turn to it after getting beat up by the markets. Some even alternate between real and paper trades and can't understand why they seem to make money on paper but lose whenever they put on a real trade. There are three reasons.

First, people are less emotional with paper trades, and good decisions are easier to make with no money at risk. Second, in paper trades, you always get perfect fills, unlike real trading. Third and most important, good trades often look murky when you consider them. The easy-looking ones are more likely to lead to problems. A nervous beginner jumps into obvious-looking

trades and loses money, but paper trades the more challenging ones. It goes without saying that hopping between real and paper trades is sheer nonsense. You either do the one or the other.

Psychology plays a huge role in how your trades turn out, and that's where paper trading fails to deliver. Pretend-trading with no money at risk is like sailing on a pond—it does little to prepare you for real sailing on a stormy sea.

There is only one good reason to paper trade—to test your discipline as well as your system.

If you can download your data at the end of each day, do your homework, write down your orders for the day ahead, watch the opening and record your entries, then track your market each day, adjusting your profit targets and stops—if you can do all of this for several months in a row, recording your actions, without skipping a day—then you have the discipline to trade real money. An impulsive person who trades for entertainment will not be able to paper trade that way because it requires real work.

You may open an account with one of several websites set up for paper trading. Enter your orders, check whether they have been triggered, and write down those “fills.” Enter all paper trades in your spreadsheet and your trading diary. If you have the willpower to repeat this process daily for several months, then you have the discipline for successful real trading.

Still, there is no substitute for trading real money because even small amounts rev up emotions more than any paper trade. You'll learn much more from even small real trades than from months of paper trading.

In recent years, I've had a front row seat watching traders progress from paper trading to profitable real-money trading. In SpikeTrade.com, we reduce fees for members who contribute picks, creating an incentive to do homework. The discipline of submitting a weekly trade plan with entry, target, and stop gets people into the habit of being organized and focused. As their picks improve, they start earning performance bonuses in our weekly competition. At that point, I may receive an e-mail saying that while they're doing well in the competition, their private trading lags behind. I tell them they're on the right track and to continue what they're doing. Sure enough, several months later their new skills migrate into real trading. Now they may write that their private trading is better than their performance in the

competition. Sure—I reply—it's because you pay more attention to real-money trades!

Speaking of trade setups, it's essential to write down all relevant numbers before you enter a trade. You're more objective before you put any money at risk; once in a trade, you'll be tempted to give it “more room to run.” That's how losers turn small drawdowns into disasters. I once consulted a man who refused to take a $200 loss until it ran into a $98,000 wipeout.

We'll focus on risk and money management in a later chapter when I discuss the concept of “The Iron Triangle of risk control.” At this point, I only want to make clear that risk management is the essential part of serious trading. Forget the days when you would look at the ceiling and say, “I'll trade 500 shares,” “I'll trade a thousand shares,” or any other arbitrary number. Later in this book, you'll learn a simple formula for sizing your trades, based on your account and risk tolerance.

At the time of this writing, I have three strategies that I trade. My favorite is a false breakout with a divergence. My second choice is a pullback to value during a powerful trend—that's the strategy of the trade shown on the screen (Figure 38.1). Last, I occasionally “fade an extreme”—bet on a reversal of an overstretched trend. Each of these strategies has its rules, but the key point is this—I'll only take a trade that fits one of them. No chasing of random cars for this old dog!

Figure 38.1 Three key demands for every planned trade. (*Source: SpikeTrade.com*)

This is a screenshot of a trade plan I drew several days prior to writing this chapter (you can see how I implemented it in Chapter 55). Notice several essential features that belong in every trade plan:

1. Trade setup—write down the three key numbers for every trade: your entry, target, and stop. Before entering the market you need to decide how much you'll pay, how much you'll risk, and how much you expect to gain. The ratio of potential reward to risk should normally be better than two to one. The only time to deviate from this rule is when technical signals are especially strong. Of course, don't fudge your target to turn a borderline trade into an acceptable one. Your target needs to be realistic.
2. Risk management—decide in advance how many dollars you're prepared to risk on this trade. Divide that amount by your risk per share—the distance from your entry to your stop. This will give you the number of shares you may trade.
3. Last but not least, every single trade must be based on a specific system or strategy. “It looks good to me” isn't a system! It's easy to become excited after hearing a stock tip or seeing a runaway trend, but the days of chasing stocks like a pup chases cars are over. If you want to trade for a living, you need to define your trade plans, strategies, or systems—call them what you like—and enter only those trades that fit their criteria.

Three Key Demands for Every Trade

There are three essential angles that must be considered for every planned trade. We'll briefly review them here and then elaborate in the chapters on specific trading systems and risk management. The discipline of these three demands is essential for anyone serious about trading.

39. Triple Screen Trading System

I developed this system and first presented it to the public in an April 1986 article in *Futures* magazine. I've been using it for trading since 1985, and it stood the test of time. I continue to tweak it, adding or changing minor features, but its basic principle remains unchanged: making trading decisions using a sequence of timeframes and indicators.

Triple Screen applies three tests or screens to every trade. Many trades that seem attractive at first are rejected by one or another screen. The trades that pass the Triple Screen test are much more likely to succeed.

The Triple Screen combines trend-following indicators on long-term charts with counter-trend oscillators on the intermediate charts. It uses special entry techniques for buying or selling short as well as tight money management rules. The Triple Screen is more than a trading system: it is a method, a style of trading.

Trend-Following Indicators and Oscillators

Beginners often look for a magic bullet—a single indicator for making money. If they get lucky for a while, they feel as if they discovered the royal road to riches. When the magic dies, amateurs give back their profits with interest and look for another magic tool. The markets are too complex to be analyzed with a single indicator.

Different indicators give contradictory signals in the same market. Trend-following indicators rise during uptrends and give buy signals, while oscillators become overbought and give sell signals. Trend-following indicators turn down in downtrends and give signals to sell short but oscillators become oversold and give buy signals.

Trend-following indicators are profitable when markets are moving but lead to whipsaws in trading ranges. Oscillators are profitable in trading ranges, but give premature and dangerous signals when the markets begin to trend. Traders say: “The trend is your friend,” and “Let your profits run.” They also say: “Buy low, sell high.” But why sell if the trend is up? And how high is high?

Some traders try to average out the signals of trend-following indicators and oscillators, but those votes are easy to rig. Just as Republicans and

Democrats in the United States keep redrawing electoral districts to create “safe” seats, traders keep selecting indicators that deliver the votes they want to see. If you use more trend-following tools, the vote will go one way, and if you use more oscillators, it'll go the other way. A trader can always find a group of indicators telling him what he wants to hear.

The Triple Screen trading system is designed to filter out the disadvantages of trend-following indicators and oscillators, while preserving their strengths.

Choosing Timeframes—the Factor of Five

Another major dilemma is that the trend of any trading vehicle can be both up and down at the same time, depending on what charts you use. A daily chart may show an uptrend, while a weekly chart shows a downtrend, and vice versa. We need a system to handle conflicting signals in different timeframes.

Charles Dow, the author of the venerable Dow Theory, stated at the turn of the twentieth century that the stock market had three trends. The long-term trend lasted several years, the intermediate several months, and anything shorter than that was a minor trend. Robert Rhea, the great market technician of the 1930s, compared these three trends to a tide, a wave, and a ripple. He recommended trading in the direction of the tide, taking advantage of the waves, and ignoring the ripples.

Times have changed, and the markets have become more volatile. Computers are cheap, or even free; live data have created better opportunities to capitalize on faster moves. We need a more flexible definition of timeframes. The Triple Screen trading system is based on the observation that every timeframe relates to the larger and shorter ones by approximately a factor of five (see Chapter 32).

Begin by asking yourself, what's your favorite timeframe. Do you prefer working with the daily, 10-minute, or any other charts? Whatever timeframe is your favorite, the Triple Screen calls that the **intermediate** timeframe. The **long-term** timeframe is one order of magnitude longer. The **short-term** timeframe is one order of magnitude shorter. Once you select your intermediate timeframe, you may not look at it until you examine the longer-term timeframe and make your strategic decision there.

For example, if you want to carry a trade for several days or weeks, then your intermediate timeframe is likely to be defined by the daily charts. Weekly charts are one order of magnitude longer, and they'll determine the long-term timeframe for you. Hourly charts are one order of magnitude shorter, and they'll determine the short-term timeframe.

Day traders who hold their positions for less than an hour can use the same principle. For them, a 5-minute chart may define the intermediate timeframe, a 25-minute chart the long-term timeframe, and a 2-minute chart the short-term timeframe.

Triple Screen demands that you examine the long-term chart first. It allows you to trade only in the direction of the tide—the trend on the long-term chart. It uses the waves that go against the tide for entering positions. For example, when the weekly trend is up, daily declines create buying opportunities. When the weekly trend is down, daily rallies provide shorting opportunities.

First Screen—Market Tide

Triple Screen begins by analyzing the long-term chart, one order of magnitude greater than the one you plan to trade. Most traders pay attention only to the daily charts, with everybody watching the same few months of data. If you begin by analyzing weekly charts, your perspective will be five times greater than that of your competitors.

Begin by selecting your favorite timeframe and call it Intermediate. Do not even glance at your intermediate chart because it'll prejudice you. Go immediately to the timeframe one order of magnitude longer—your long-term chart. That's where you'll make your strategic decision to be a bull or a bear. After that, return to the intermediate timeframe and start making tactical decisions, such as where to enter and where to place a stop.

If you make the mistake of looking at the daily chart first, you'll be prejudiced by its patterns. First, make an unbiased decision on a long-term weekly chart before even glancing at the daily.

The original version of Triple Screen used the slope of weekly MACD-Histogram as its weekly trend-following indicator (Figure 39.1). It was very sensitive and gave many buy and sell signals. Later I switched to using the slope of a weekly exponential moving average as my main trend-following

tool on long-term charts. After I invented the Impulse system (described in the following chapter), I began to use it for the first screen of Triple Screen. The Impulse system combines the best features of the previous two methods. It is not quite as jumpy as MACD-Histogram but is faster to react than the slope of an EMA.

Figure 39.1 Gold weekly, with 26- and 13-EMAs and MACD-Histogram (12-26-9). (*Chart by Stockcharts.com*)

Using Weekly MACD-Histogram as the First Screen of Triple Screen

Triple Screen requires us to examine weekly charts before even looking at the dailies. The slope of MACD-Histogram is defined by the relationship between its two latest bars.

This indicator flashes a buy signal when its slope turns up and a sell signal when its slope turns down. The best buy signals occur when MACD-

Histogram turns up from below its centerline. The best sell signals are given when its slope turns down from above its centerline (see Indicator Seasons in Chapter 32).

When the slope of MACD-Histogram turns up (arrows A, C, and E), it allows us to trade only from the long side or stand aside. When that slope turns down (arrows B and D), it allows us to trade only from the short side or stand aside.

Note that the buy signals at A and E are of better quality than at C—because the signal C occurred above the centerline. It is better to buy in spring than in summer. At the right edge of the chart, the uptrend is very strong because the signal E came from a bullish divergence: a double bottom of prices (A and E) was accompanied by a much shallower second bottom of the indicator.

As you'll read in the next chapter, the Impulse system colors every bar green when it's bullish, red when bearish, and blue when neutral. The Impulse system doesn't tell you what to do. It's a censorship system that signals what you're prohibited from doing. When the Impulse system is red, it prohibits you from buying. When it is green, it prohibits you from shorting. Glancing at a weekly chart when you want to buy, you have to wait until it stops being red. Glancing at a weekly chart when you want to sell short, you have to make sure it isn't green. The blue Impulse permits you to trade either way.

Some traders use other indicators to identify major trends. Steve Notis wrote an article in *Futures* magazine showing how he used the Directional System as the first screen of Triple Screen. The principle is the same. You can use most trend-following indicators, as long as you analyze the trend on the weekly charts first and then look for trades on the daily charts only in that direction.

Screen One Summary: Identify the weekly trend using a trend-following indicator and trade only in its direction.

A trader has three choices: buy, sell, or stand aside. The first screen of the Triple Screen trading system takes away one of those options. It acts as a censor who permits you only to buy or stand aside during major uptrends. It allows you only to sell short or stand aside during major downtrends. You have to swim with the tide or stay out of the water.

Second Screen—Market Wave

The second screen of Triple Screen identifies the wave that goes against the tide. When the weekly trend is up, daily declines point to buying opportunities. When the weekly trend is down, daily rallies point to shorting opportunities.

The second screen applies oscillators, described in a previous section, to the daily charts in order to identify deviations from the weekly trend. Oscillators give buy signals when markets decline and sell signals when they rise. The second screen of the Triple Screen allows you to take only those signals on the daily charts that put you in gear with the weekly trend.

Screen Two: Apply an oscillator to a daily chart. Use daily declines during weekly uptrends to find buying opportunities and daily rallies during weekly downtrends to find shorting opportunities. I like using Force Index, described in chapter 30, for the second screen, but other oscillators, such as RSI, Elder-ray, or Stochastic also perform well.

When the weekly trend is up, Triple Screen takes only buy signals from daily oscillators but doesn't short their sell signals. The 2-day EMA of Force Index gives buy signals when it falls below its zero line, as long as it doesn't fall to a new multi-week low. When the weekly trend is down, Force Index gives shorting signals when it rallies above its centerline, as long as it doesn't rise to a new multi-week high (Figure 39.2).

Figure 39.2 Gold daily, with 26- and 13-EMAs and 2-day Force Index. (*Chart by Stockcharts.com*).

Daily Force Index—the Second Screen of Triple Screen.

The 2-day EMA of Force index is one of several oscillators that can work for the second screen of the Triple Screen trading system. Force Index marks buying opportunities when it falls below its centerline. It marks selling opportunities when it rises above its centerline. When the weekly trend is up (marked here with a green horizontal bar), take only buy signals from the daily oscillator for entering long positions. When the weekly trend is down (marked by a red horizontal bar), take only sell signals for entering short positions.

Notice a bullish divergence, accompanied by a false downside breakout before the start of the uptrend (marked with a diagonal green arrow). At the right edge of the screen, Gold is flying, along with most gold stocks. I'm actively buying them—but not Gold ETFs. A Traders' Camp graduate from Australia wrote the other day: “I bought XAU ETF but it is being left far

behind by NCM, our biggest Gold Miner. Is that the normal scenario for ETFs?" Yes, Sir!

Other oscillators, such as Stochastic and RSI (see Chapters 26 and 27), give trading signals when they enter their buy or sell zones. For example, when weekly MACD-Histogram rises but daily Stochastic falls below 30, it identifies an oversold area, a buying opportunity. When the weekly MACD-Histogram declines but daily Stochastic rises above 70, it identifies an overbought area, a shorting opportunity.

Third Screen—Entry Technique

The Third Screen is your entry technique, and here you have quite a bit of latitude. You can go to an even shorter time-frame, especially if you have live data, or you can use the same intermediate timeframe.

In the original *Trading for a Living* I recommended looking for a ripple in the direction of the market tide: buying a breakout above the previous day's high for entering longs or shorting a breakdown below the previous day's low for entering shorts.

The downside of that approach was that the stops were quite wide. Buying a breakout above the previous day's high and placing a stop below that day's low could mean a wide stop after a wide-range day, either putting a lot of money at risk or reducing position size. At other times, when the pre-breakout day was very narrow, placing the stop right below its low would expose that trade to the risk of being stopped out by market noise.

The breakout technique is still valid, but I seldom use it. With the wide availability of intraday data, I like to switch to 25-minute and 5-minute charts and use day-trading techniques for entering my swing trades. If you don't have access to live data and need to place an order in the morning, before leaving for the day, I recommend an alternative approach which I call "an average EMA penetration."

Almost every rally is penetrated by occasional pullbacks, and you want to measure how deeply those pullbacks drop below your fast EMA. Look at the daily chart for the past four to six weeks, and if it is in an uptrend, measure how deeply prices penetrate below their EMA during normal pullbacks (Figure 39.3).

- Calculate an average penetration
- Subtract yesterday's EMA level from today's and add this number to today's EMA: this will tell you where your EMA is likely to be tomorrow.
- Subtract your average penetration from your estimated EMA level for tomorrow and place your buy order there. You'll be fishing to buy at a bargain level, during a pullback—instead of paying a premium for buying a breakout.

Figure 39.3 Gold daily, with 26- and 13-EMAs. (*Chart by Stockcharts.com*).

An Average Downside Penetration—the Third Screen of Triple Screen

Here we zoom in on the chart from Figure 39.2. We can sharpen Triple Screen buy signals by not waiting for the 2-day Force rally back above zero. We can use its declines below zero as alerts and then place our buy orders below value, using an average downside penetration.

In the example in Figure 39.3, prices dipped below their fast EMA (colored red) on four occasions. An average downside penetration was $9.60. At the right edge of the screen, the 13-day EMA stands at $1,266. Deducting the recent average downside penetration from that number suggests that if today sees a spell of panic selling, we should place our buy order approximately $9 below the latest level of EMA. We can perform this calculation on a daily

basis, until we finally get an opportunity to buy low. This is a much more peaceful approach than chasing runaway prices.

These rules are for buying during an uptrend. Reverse them for selling short in downtrends. Keep in mind though that downtrends tend to move twice as fast as uptrends.

Triple Screen Summary

Weekly Trend	Daily Trend	Action	Order
Up	Up	Stand aside	None
Up	Down	Go long	EMA penetration or an upside breakout
Down	Down	Stand aside	None
Down	Up	Go short	EMA penetration or a downside breakout

When the weekly trend is up and a daily oscillator declines, place a buy order below the fast EMA on the daily chart, at a level of an average downside penetration. Alternatively, place a buy order one tick above the high of the previous day. If prices rally, you will be stopped in long automatically when the rally takes out the previous day's high. If prices continue to decline, your buy-stop will not be touched. Lower your buy order the next day to the level one tick above the latest price bar. Keep lowering your buy-stop each day until stopped in or until the weekly indicator reverses and cancels its buy signal.

When the weekly trend is down, wait for a rally in a daily oscillator and place an order to sell short above the fast EMA on the daily chart, at a level of an average upside penetration. Alternatively, place an order to sell short one tick below the latest bar's low. As soon as the market turns down, you will be stopped in on the short side. If the rally continues, keep raising your sell order daily. The aim of a trailing sell-stop technique is to catch an

intraday downside breakout from a daily uptrend in the direction of a weekly downtrend.

Triple Screen in Day-Trading

If you day-trade, you may select a 5-minute chart as your intermediate timeframe. Again, do not look at it, but go to a 25- or a 30-minute chart first, which will be your long-term chart. Make a strategic decision to be a bull or a bear on that longer-term chart, and then return to your intermediate chart to look for an entry and stop (Figure 39.4).

Figure 39.4 On the left: AMZN 30-min chart with a 13-bar EMA and 12-26-9 MACD-Histogram. On the right: AMZN 5-min chart with a 13-bar EMA, 0.6% channel, and 2-bar Force Index. (*Charts by Stockcharts.com*)

Triple Screen in Day-Trading

The shares of Amazon.com, Inc. (AMZN) are a popular trading vehicle, thanks to their volatility and liquidity. The principles of Triple Screen are the same here as on the longer-term charts. Here, a longer-term chart whose every bar represents 30 minutes of trading defines the long-term trend. With it rising, we turn to a short-term chart, whose every bar represents 5 minutes of trading. When its 2-bar Force Index dips below zero, it marks a wave that

goes against the tide—an opportunity to buy at a lower price. A channel that contains approximately 95% of all prices helps set profit targets.

A neat combination of timeframes for day-trading stocks is a set of 39- and 8-minute charts. The U.S. stock market is open from 9:30 a.m. to 4 p.m.—six and a half hours or 390 minutes. Using a 39-minute chart as your long-term screen neatly divides each day into 10 bars. Make your strategic decision there, and then drop down to a chart that's 5 times faster—an 8-minute chart—for tactical decisions on entries and exits.

Don't mash together too many timeframes. If you're swing-trading, you can briefly use an intraday chart to time your entry, but then return to the daily charts. If you keep watching intraday charts, chances are they'll shake you out of the trade prematurely. If you day-trade, then the weekly chart is not really relevant, but you may take a quick look at the daily chart. The rule is this: select your favorite (intermediate) chart, pair it with a long-term chart that is 5 times longer, and go to work.

Stops and Profit Targets

Proper money management is essential for successful trading. A disciplined trader takes his profits at targets, cuts losses short, and outperforms those who keep hoping and hanging on to bad trades. Before you enter a trade, write down three numbers: the entry, the target, and the stop. Placing a trade without defining these three numbers is gambling.

Triple Screen calls for setting profit targets using long-term charts and stops on the charts of your intermediate timeframe. If you use weekly and daily charts, set profit targets on the weeklies but stops on the dailies. When buying a dip on a daily chart, the value zone on a weekly chart presents a good target. When day-trading and using a 25-minute and a 5-minute pair, set the profit target on a 25-minute chart and the stop on a 5-minute chart. This helps you aim at the greater results, while holding down the risk.

The Triple Screen trading system calls for placing fairly tight stops. Since it has you trading in the direction of the market tide, it doesn't give much room to losing trades. Get on with the tide—or get out. We'll return to this topic in Chapter 54, “How to Set Stops.”

40. The Impulse System

The idea for the Impulse system came to me in the mid-1990s. I woke up in the middle of the night in a faraway hotel and sat up bolt upright in bed with the thought that I could describe any market move in any timeframe, using only two criteria: inertia and power. By combining them, I could find stocks and futures with both bullish inertia and bullish power and trade them long. I could also find stocks and futures with both bearish inertia and power and sell them short.

A good measure of the **inertia** of any trading vehicle is the slope of its fast EMA. A rising EMA reflects bullish inertia, while a falling EMA reflects bearish inertia. The **power** of any trend is reflected in the slope of MACD-Histogram. If its latest bar is higher than the previous bar (like the height of the letters m–M) or less deep than the previous bar (like the depth of the letters y–v), then the slope of MACD-Histogram is rising, and the power is pushing up. If the latest bar of MACD-Histogram is lower than the previous one (like the depth of the letters v–y or the height of the letters M–m), then the slope is declining, and the power is pushing down. When we use MACD-Histogram to define power, it doesn't matter whether it's above or below zero: what matters is the relationship of the last two bars of MACD-Histogram.

It is relatively simple to program most software packages to color price bars or candles using the Impulse system. If both indicators are rising, the bar is green—bullish. If both are falling, the bar is red—bearish. When the two indicators move against one another, that bar is blue—neutral (Figure 40.1).

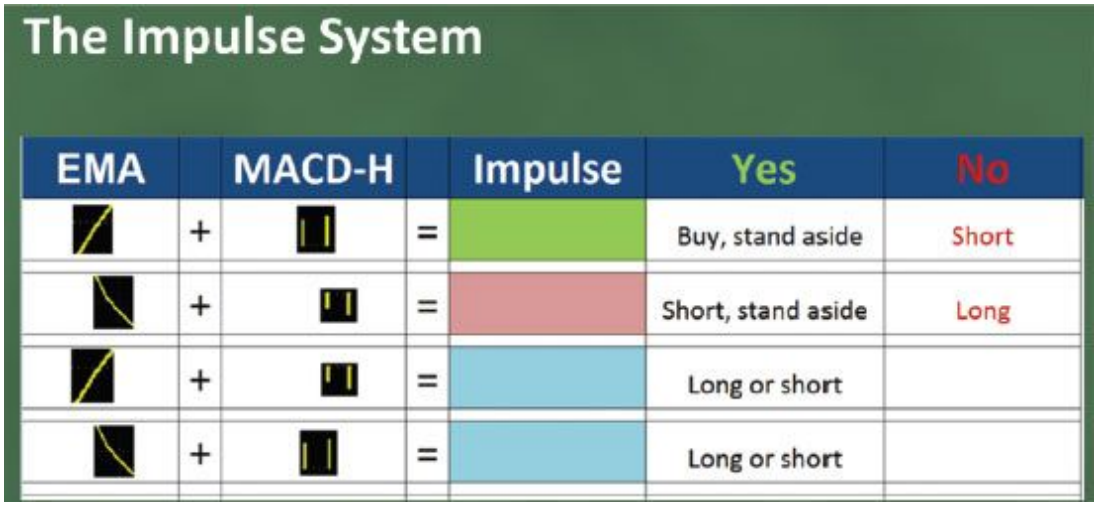


Figure 40.1 The colors of the Impulse system.

At first, I anticipated making this system automatic—buy green, short red, and cash checks on all colors. Backtesting the Impulse system threw cold water on that idea. The automatic system caught every single trend, but it got whipsawed during trading ranges, where it kept flipping between green and red.

I set the Impulse system aside, but kept thinking about it. A few years later it dawned on me: this wasn't an automatic trading system—it was a censorship system! It didn't tell me what to do—it told me what not to do. If either weekly or daily bar was red—no buying allowed. If either weekly or daily bar was green—no shorting permitted.

Ever since that discovery, I've been using the Impulse system for all my trades. I presented it to the public in my 2002 book *Come into My Trading Room*, which *Barron's* named a book of the year. The Impulse system is becoming increasingly popular worldwide, and its terminology has entered the language of trading.

- EMA rising & MACD-Histogram rising (especially below zero) = Impulse is green, bullish.
- Shorting prohibited, buying or standing aside permitted.
- EMA falling & MACD-Histogram falling (especially above zero) = Impulse is red, bearish.

  Buying prohibited, shorting or standing aside permitted.

- EMA rising & MACD-Histogram falling = Impulse is blue, neutral. Nothing is prohibited.
- EMA falling & MACD-Histogram rising = Impulse is blue, neutral. Nothing is prohibited.

And that's how I've been using the Impulse system ever since (Figure 40.2). It keeps me out of trouble. I may develop my trading plans based on any number of ideas, signals, or indicators—and then the Impulse system forces me to wait until it no longer prohibits an entry in the planned direction. In addition, the Impulse system helps me recognize when a trend starts weakening and suggests an exit.

Figure 40.2 SSYS weekly with 13- and 26-week EMAs, 12-26-9 MACD-Histogram and the Impulse system. (*Chart by Stockcharts.com*)

The Impulse System

The Impulse system can sharpen any method of finding trades, whether technical or fundamental. Let's review an example, using the stock of Stratasys, Inc. (SSYS)—one of the two leading stocks in the additive manufacturing industry. In 2012, I published the world's first popular e-book on additive manufacturing in which I called for a boom in its stocks.

Vertical green arrows mark bars immediately following red bars. Red prohibits you from buying. The best time to buy is immediately following red's disappearance. You can see how those green arrows pick one intermediate bottom after another, including the buy signal at the right edge of the chart. Having an objective method gives you the confidence to buy as soon as a decline screeches to a halt.

The Impulse system also suggests good areas for profit taking. Slanted red arrows point to blue bars that occur after a series of green bars far away from value. They indicate that bulls are choking up—a good time to cash out and wait for the next buying opportunity.

Entries

Green and red bars of the Impulse system show when both inertia and power are pointing in the same direction. At a green bar, bulls are in charge and the uptrend is accelerating. At a red bar, bears are dominant and the downtrend is in full swing. A fast EMA and MACD-Histogram may stay in gear with each other for only a few bars, but that's when the market travels fast—the impulse is on!

Before you start applying the Impulse system to your favorite market, remember the Triple Screen's insistence on analyzing markets in more than one timeframe. Select your favorite timeframe and call it intermediate. Multiply it by five to define your long-term timeframe. If your favorite chart is daily, analyze the weekly chart first and make a strategic decision to be a bull or a bear. Use the Impulse system to decide when you're permitted to enter long or short positions.

- If you're a short-term momentum trader, you can buy as soon as both timeframes turn green and take profits as soon as one of them fades to blue.

- When trying to catch market turns, the best trading signals are given not by green or red but by the loss of green or red colors.

If a stock is falling, but your analysis indicates that a bottom is near, monitor the Impulse system on weekly and daily charts. If even one of them shows red, the downtrend is still in force and buying is not permitted. When both timeframes stop being red, they allow you to buy.

If you think that a stock is forming a top and is about to turn down, examine the Impulse system on both weekly and daily charts. If even one of them is green, it's a sign that the uptrend is still alive, and no shorting is permitted. When the green disappears from both timeframes, you may start shorting.

The shorter a timeframe, the more sensitive its signals: the Impulse on a daily chart almost always changes colors ahead of the weekly. When day-trading, the 5-minute chart changes colors ahead of a 25-minute chart. If my studies show that the market is bottoming and getting ready to turn up, I wait until the daily chart stops being red and turns blue or even green; then I start watching the weekly chart, which is still red. As soon as it turns from red to blue, it allows me to buy. This technique saves me from buying too soon, while the market is still declining.

I use the same approach to shorting. When I think that a top is forming and the daily Impulse stops being green and turns blue or even red, I closely monitor the weekly chart. As soon as it loses its green color, it permits me to go short. Waiting for both timeframes to lose the color that is contrary to my plan helps ensure that I trade in gear with the market and not against it.

Remember, the Impulse system is a censorship system. It doesn't tell you what to do—but it clearly tells you what you're not allowed to do. You're not supposed to go against the censor.

Many programs for technical analysis include a feature called “conditional formatting.” It allows you color price bars or candles depending on the slope of the EMA and MACD-Histogram. A brilliant programmer in Chicago named John Bruns used this feature when he included the Impulse system in tool kits we call elder-disks[1]. If you use a platform that doesn't permit conditional formatting, you can still use the Impulse system. Simply observe the slopes of the EMA and MACD-Histogram: their combination will tell you what should be the color of the latest bar.

If you know how to program, you can add more features to the Impulse system. You can test different EMA lengths or MACD settings, looking for those that work best in your market. A day trader can program sound alarms to monitor color changes in several markets without being glued to the screen.

Exits

If you're a short-term momentum trader, close out your trade as soon as the color of the Impulse system stops supporting the direction of your trade, even in one of the two timeframes. Usually, the daily MACD-Histogram turns ahead of the weekly. When it ticks down during an uptrend, it shows that the upside momentum is weakening. When the buy signal disappears, take profits without waiting for a sell signal.

Reverse this procedure in downtrends. Cover shorts as soon as the Impulse system stops being red, even in one of the two timeframes. The most dynamic part of the decline is over, and your momentum trade has fulfilled its goal.

The Impulse system encourages you to enter cautiously but exit fast. This is the professional approach to trading. Beginners tend to do the opposite; jump into trades and then take forever to exit, hoping for the market to turn their way.

A swing trader may stay in a trade, even if one of the timeframes turns blue. What he should never do is stay in a trade against the color. If you're long, and one of the timeframes turns red, it is time to sell and go back to the sidelines. If you're short, and the Impulse system turns green, it signals to cover your short position.

The Impulse system helps identify islands of order in the ocean of market chaos by showing when the crowd, usually so aimless and disorganized, becomes emotional and starts to run. You enter when a trend pattern emerges and exit when it starts to sink back into chaos.

41. Channel Trading Systems

Market prices tend to flow in channels, like rivers in their valleys. When a river touches the right edge of its valley, it turns left. When it touches the left rim of its valley, it turns right. When prices rally, they often seem to stop at an invisible ceiling. Their declines seem to stop at invisible floors. Channels help us anticipate where those support and resistance levels are likely to be encountered.

Support is where buyers buy with greater intensity than sellers sell. Resistance is where sellers sell with greater intensity than buyers buy (see Chapter 18). Channels show where to expect support and resistance in the future.

Channels help identify buying and selling opportunities and avoid bad trades. The original research into trading channels was conducted by J. M. Hurst and described in his 1970 book, *The Profit Magic of Stock Transaction Timing*.

The late great mathematician Benoit Mandelbrot was hired by the Egyptian government to create a mathematical model of cotton prices—the main agricultural export of that country. After extensive study, the scientist made this finding: “prices oscillate above and below value.” It may sound simple, but in fact it's profound. If we accept this mathematical finding and if we have the means to define value and measure an average oscillation, we'll have a trading system. We'll need to buy below value and take profits at value or sell short above value and cover at value.

We have already agreed that value is in the zone between a short and a long moving averages. We can use channels to find normal and abnormal oscillations.

Two Ways to Construct a Channel

We may construct a channel by plotting two lines parallel to a moving average: one above and another below. We may also vary the distance between the channel lines depending on that market's volatility (standard deviation channels).

A symmetrical channel, centered around a moving average, is useful for trading stocks and futures. A standard deviation channel (sometimes called

Bollinger bands) is good for those who trade options.

Channels mark the boundaries between normal and abnormal price action. It is normal for prices to stay inside a well-drawn channel, and only unusual events push them outside. The market is undervalued below its lower channel line and overvalued above its upper channel line.

Symmetrical Channels

Earlier we've discussed using a set of two moving averages for trading (see Chapter 22). With such a pair, use the slower one as the backbone of your channel. For example, if you use 13-day and 26-day EMAs, draw your channel lines parallel to the 26-day EMA.

The width of a channel depends on the coefficient selected by the trader. This coefficient is usually expressed as a percentage of the EMA level.

$$\text{Upper Channel Line} = \text{EMA} + \text{Channel Coefficient} \bullet \text{EMA}$$

$$\text{Lower Channel Line} = \text{EMA} - \text{Channel Coefficient} \bullet \text{EMA}$$

When setting a channel for any market, start with 3% or 5% of the EMA and keep adjusting those values until a channel contains approximately 95 percent of all price data for the past 100 bars, about five months on a daily chart. This is similar to trying on a shirt: you look for the one that fits not too loose or too tight, with only your wrists and neck sticking out. Only the extreme prices will protrude outside of a well-drawn channel.

Volatile markets require wider channels, while quiet markets require more narrow channels. Cheaper stocks tend to have higher coefficients than expensive ones. Long-term charts require wider channels. As a rule of thumb, weekly channel coefficients are twice as large as daily ones.

I used to plot channels by hand until my programmer wrote an add-on for several software packages called an Autoenvelope. It automatically plots correct channels for any trading vehicle in any timeframe (Figure 41.1). It's included on elder-disks for several popular programs.

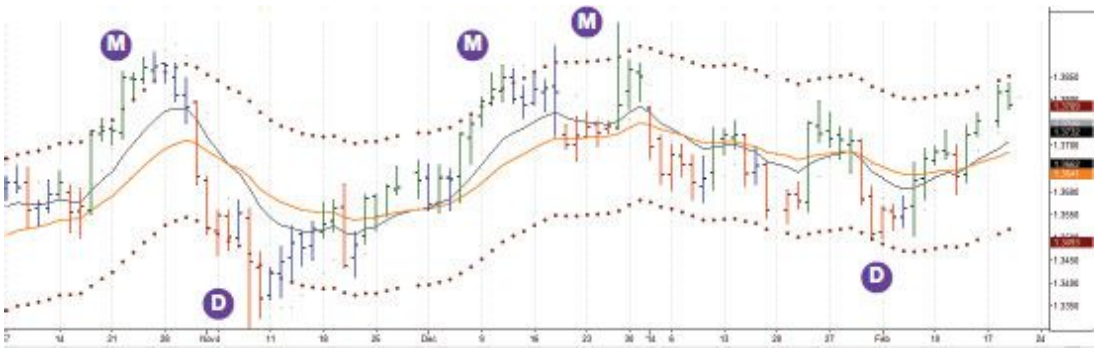


Figure 41.1 Euro futures, with 26- and 13-day EMAs, the Impulse system, and Autoenvelope. (*Chart by Tradestation*)

Channels: Autoenvelope

This chart shows several recent months of trading in the March 2014 Euro currency futures (ESH14). Futures are much more transparent and true than the murky forex deals. Whenever I trade currencies, I use currency futures.

Warren Buffet refers to the stock market as a manic-depressive fellow, and his description applies to non-equity markets. Here you see the Euro swinging above and below value. When it rises above the upper channel line, it shows that the market has become manic (marked with a letter M), and when it falls below the lower channel line, it is depressed (marked with a letter D).

Buffett observes that the trouble with most people is that they become infected by the mood of Mr. Market—they want to buy when he is manic and sell when he's depressed. Plotting a channel helps you diagnose the market's mania and depression and avoid becoming infected by either. One of my strict rules is never to buy above the upper channel line or sell short below the lower channel line. I may miss a runaway trend because of this restriction, but my safety is greatly increased. At the right edge of the screen, the Euro is rising very near its upper channel line—it looks like a manic episode is about to develop.

Mass Psychology

An exponential moving average reflects the average consensus of value in its time window. When prices are near their moving average, the market is fairly valued. When they decline near the lower channel line, the market is undervalued. When prices rise to the upper channel line, the market is

overvalued. Channels help find buying opportunities when the market is cheap and shorting opportunities when the market is dear.

When prices fall below their moving average, bargain hunters step in. Their buying as well as short covering by bears stops declines and lifts prices. When prices rise above value, sellers see an opportunity to take profits on long positions or go short. Their selling caps the rise.

When the market sinks to the bottom of a depression, its mood is about to improve. Once it rises to the height of its mania, it's about to start calming down. A channel marks normal limits of mass optimism and pessimism. The upper channel line shows where bulls run out of steam, while the lower channel line shows where bears become exhausted.

At the upper channel line, bears have their backs against the wall as they fight off the bulls. At the lower channel line, bulls have their backs against the wall and fight off the bears. We all fight harder when our backs are against the wall, and that's why channels tend to hold.

If a rally shoots out of a channel and prices close above it, it shows that the uptrend is exceptionally strong. When a rally fails to reach the upper channel line, it is a bearish sign, as it shows that bulls are becoming weaker. The reverse applies to downtrends.

My friend Kerry Lovvorn finessed this idea by plotting not one but three sets of channels around a moving average. The width of his channels is driven by Average True Ranges (see Chapter 24). His three channels are set at one, two, and three ATRs away from the moving average. Normal moves tend to stay within 1-ATR channels, while only extreme moves go outside of 3-ATRs, indicating a reversal is near (Figure 41.2).

Figure 41.2 RSOL daily with 21-day EMA and 1-, 2-, and 3-ATR channels, MACD-Histogram 12-26-9, and the Impulse system. (*Chart by Tradestation*)

Multiple ATR Channels

This chart of Real Goods Solar, Inc. (RSOL) reflects several months of action:

- Area A—Warning. Prices stab outside +3 ATRs—the uptrend has reached an extreme.
- Area B—Sell. Prices couldn't hold above +2 ATRs—take profits on long positions.
- Area C—Alert. Decline stopped at −2 ATRs—a sign of bottoming.
- Area D—Alert confirmed. Prices holding above −2 ATRs—bottom is being built.
- Area E—Buy. False downside breakout reaches −3 ATRs and rejects that low.
- Area F—Warning. Prices stab outside of +3 ATRs—watch whether +2 ATRs will hold.

- Area G—Warning. Prices stab outside of +3 ATRs—watch whether +2 ATRs will hold.
- Area H—Another warning. Prices stab outside of +3 ATRs—watch whether +2 ATRs will hold.
- Area I—Sell. Prices couldn't hold above +2 ATRs—take profits on long positions.

Channels help us remain objective, while other traders get swept up in mass bullishness or bearishness. When prices rally to the upper channel line, you see that mass bullishness is being overdone, and it's time to think about selling. When prices drop near the lower channel line and everyone turns bearish, you know that it's time to think about buying instead of selling.

Trading Rules

Amateurs like to bet on long shots—they tend to buy upside breakouts and short (if they ever sell short) downside breakouts. When an amateur sees a breakout, he expects riches from a major new trend.

Professionals, on the other hand, tend to trade against deviations and for a return to normalcy. The pros know that most breakouts are exhaustion moves that are soon aborted. That's why they like to fade breakouts—trade against them, selling short as soon as an upside breakout stalls and buying when a downside breakout starts returning into the range.

Breakouts can produce spectacular gains when a major new trend blows out of a channel, but in the long run it pays to trade with the pros. Most breakouts fail and are followed by reversals, which is why channel lines mark attractive zones for entering trades against breakouts, with profit targets in the value zone.

You can use moving-average channels as a stand-alone trading method or combine it with other techniques. Gerald Appel, a prominent market researcher and money manager in New York, recommended these rules for trading with channels:

1. Draw a moving average and build a channel around it. When a channel is relatively flat, the market is almost always a good buy near the bottom of its trading channel and a good sell near the top.

2. When the trend turns up and a channel rises sharply, an upside penetration of the upper channel line shows very strong bullish momentum. It indicates that you will probably have one more chance to sell in the area of the highs that are being made. It is normal for the market to return to its moving average after an upside penetration, offering an excellent buying opportunity. Sell your long position when the market returns to the top of the channel.

This also works in reverse during sharp downtrends. A breakout below the lower channel line indicates that a pullback to the moving average is likely to occur, offering another opportunity to sell short. When prices return to the lower channel line, it is time to cover shorts.

The best trading signals are given by a combination of channels and other technical indicators (Figure 41.3). Indicators give some of their strongest signals when they diverge from prices. A method for combining channels and divergences was described to me by the late Manning Stoller.

1. A sell signal is given when prices reach the upper channel line while an indicator, such as MACD-Histogram, traces a bearish divergence. It shows that bulls are becoming weak when prices are overextended.
2. A buy signal is given when prices reach the lower channel line while an indicator traces a bullish divergence. It shows that bears are becoming weak when prices are already low.
   We must analyze markets in multiple timeframes. Look for buys on the daily charts when prices are rising on the weeklies. Look for shorting opportunities on the dailies when prices are sinking on the weekly charts.
3. Go long near the moving average when the channel is rising, and take profits at the upper channel line. Go short near the MA when the channel is falling, and take profits at the lower channel line.
   When a channel rises, it pays to trade only from the long side, buying in the value zone which lies between the fast and slow moving averages, and then selling at the upper channel line. When a channel declines, it pays to short in the value zone and cover at the lower channel line.

Figure 41.3 SIX daily with 26- and 13-day EMAs, 6% channel, MACD-Histogram 12-26-9, and the Impulse system. (*Chart by Stockcharts.com*)

Combining Channels and MACD Signals

This chart reflects several months of action in Six Flags Entertainment Corporation (SIX).

- Area A—while prices have reached the lower channel line, a new record low of MACD-Histogram suggests that this low will be retested or exceeded.
- Area B—channel line rejected, rally is likely ahead.
- Area C—prices reached their upper channel line and recoiled—reversal is likely.
- Area D—buy. Prices have reached the lower channel line, while MACD-Histogram has traced out a bullish divergence between bottoms A and D, with a break at C.

- Area E—while prices have reached their upper channel line, a new record high of MACD-Histogram suggests that this high is likely to be retested or exceeded.
- Area F—pullback to value completed; MACD-Histogram breaks below zero, creating a setup for a possible bearish divergence. Still may buy to ride back to the prior high.
- Area G—sell and sell short. Prices have reached the upper channel line, while MACD-Histogram has traced out a bearish divergence between tops E and G, with a break at F.

Standard Deviation Channels (Bollinger Bands)

The unique feature of these channels is that their width changes in response to market volatility. Their trading rules differ from those of regular channels.

1. Calculate a 21-day EMA.
2. Subtract the 21-day EMA from each closing price to obtain all the deviations from the average.
3. Square each of the deviations and get their sum to obtain the total squared deviation.
4. Divide the total squared deviation by the EMA length to obtain the average squared deviation.
5. Take the square root of the average squared deviation to obtain the standard deviation.

These steps, outlined by Bollinger, have been included in many software packages. A band becomes wider when volatility increases but it narrows down when volatility decreases. A narrow band identifies a sleepy, quiet market. Major market moves tend to erupt from flat bases. Bollinger bands help identify transitions from quiet to active markets.

These bands are useful for options traders because option prices are largely driven by swings in volatility. Narrow Bollinger bands help you buy when volatility is low and options are relatively cheap. Wide bands help you decide to write options when volatility is high and options are expensive.

When we return to options in the following chapters, you'll read that buying options is a losers' game. Professional traders write options. Wide Bollinger Bands can signal when to be more active with your writes. If you trade stocks or futures rather than options, it's better to use regular channels as profit targets; trading is hard enough without trying to shoot at a moving target, such as a Bollinger Band.

Note

1. These are available for various trading programs, listed at elder.com.

PART 8

Trading Vehicles

All trading vehicles are divided into several classes. Their charts may look similar on a computer screen, but don't let their looks deceive you. Each group has its pluses and minuses. They offer different profit opportunities and carry different risks. Choosing what to trade is among your most important market decisions.

We'll review the following major groups to help you make a conscious decision on which to focus:

- Stocks
- ETFs
- Options
- CFDs
- Futures
- Forex

Whichever group you select, make sure your trading vehicle meets two essential criteria: liquidity and volatility.

Liquidity refers to the average daily volume, compared with other vehicles in its group. The higher it is, the easier it'll be for you to get in and out of your trades. You may build a profitable position in an illiquid stock, only to lose at the exit due to especially bad slippage.

I learned this lesson decades ago, after building a 6,000-share position in a fairly inactive stock. When it began to sag, I decided to sell, and that's when I discovered that its average daily volume was only 9,000 shares. There were

so few people trading it that my own sales began to depress its price. Taking several days to trade out of my 6,000-share lot felt like taking a fat cow through a very narrow gate and leaving large strips of its hide on gate posts. Now I focus on U.S. stocks that trade over a million shares a day. That's where I can slip in and out of my trades unnoticed and unmolested. With a large number of traders, there are plenty of orders to buy and sell, and my slippage, when it occurs, is small.

Volatility is the extent of average short-term movement of a trading vehicle. The higher the volatility of a trading instrument, the more opportunities it presents. Popular stocks tend to swing a lot. On the other hand, stocks of many utility companies that are quite liquid are very hard to trade because of low volatility—they tend to stay in narrow ranges.

There are several ways to measure volatility, but a good practical tool is “beta.” It compares any vehicle's volatility to its benchmark, such as a broad index. If a stock's beta is 1, it means that its volatility is equal to that of the S&P 500. A beta of 2 means that if the S&P rises 5%, the stock is likely to rally 10%, but it is also likely to drop 10% if the S&P falls by 5%. A beta of 0.5 means that the stock is likely to rise or fall by half of the percentage of the S&P. It would be better for a beginner to focus on low beta vehicles. You can find betas for most stocks on all key financial websites, starting with Yahoo Finance. Betas are like trail markers on ski slopes: green for beginners, blue for intermediate skiers, and black diamonds for experts.

Time Zones Globalization has lured many people to trade far away from home. I meet traders in Australia who trade U.S. stocks, and talk with traders in the United States who wrestle with European indexes. Still, you should think twice before trading far away from your own time zone. Your data screen is connected to the world, but your physical self is rooted in the area where you live. If you trade while sleepy, you put yourself at a disadvantage. If your head is on the pillow while your trade is open on the other side of the globe, you make it easier for your competitors to pick your pockets.

Some time zones are easier to trade than others. For example, it is comfortable to trade the U.S. markets from Western Europe, where the New York Stock Exchange opens at 3:30 pm and closes at 10 pm. It is very hard to trade U.S. markets from Asia, where the time difference is likely to be 12 hours. There are always exceptions to a rule, and you may enjoy trading at

night—but if you feel tired and sleepy, don't push yourself but find a local market.

Long or Short There's more to trading than buying and waiting for prices to rise. Markets are two-way streets: they go down as well as up. Beginners only buy, but experienced traders are comfortable with selling short.

In a nutshell, to make money shorting you identify a vehicle that you expect to drop, borrow it from your broker (giving him a deposit), and sell it. After it declines, you buy it back at a cheaper price, return the borrowed shares to your broker, and get your deposit back. Your profit is the difference between the higher selling and lower buying prices. This is the same as in buying, only the process is reversed: sell first, buy later. Of course, shorting is too complex a topic to cover in two paragraphs, which is why I refer you to my latest book (prior to this one): *The New Sell & Sell Short: How to Take Profits, Cut Losses, and Benefit from Price Declines* (John Wiley & Sons, 2011).

42. Stocks

A stock is a certificate of ownership of a business. If you buy 100 shares of a company that had issued 100 million shares, you'll own one-millionth of that firm. If other people want to own that business, they'll have to bid for your shares.

When masses of people start liking the prospects of a business, their orders for its shares will push up the stock price. If they don't like the outlook of that business, they'll start selling their shares, depressing prices. Public companies try to make their shares more attractive in order to push up share prices because it helps them raise more equity or issue debt. Top executives' bonuses are often tied to stock prices.

Fundamental values, especially earnings, drive prices in the long run, but, as John Maynard Keynes, the famous economist and a canny stock picker once retorted—”In the long run we're all dead.” Markets are full of cats and dogs, stocks of companies with feeble or nonexistent earnings that at some point fly through the roof, defying gravity. Stocks of new sexy industries can levitate on expectations of future earnings rather than any real profits. Stocks of solidly profitable, well-run companies may drift sideways or down if the crowd isn't excited about their outlook.

Warren Buffett is fond of saying that buying a stock makes you a partner of a manic-depressive fellow he calls Mr. Market. Each day, Mr. Market runs up to you and offers to buy you out or sell his shares to you. Most of the time, you should ignore him because he's crazy, but occasionally Mr. Market becomes so depressed that he offers you his shares for a song—and that's when you should buy. At other times, he becomes so manic that he offers an insane price for your shares—and that's when you should sell.

Buffett's idea is brilliant in its simplicity, but hard to implement. Mr. Market's mood is so contagious that it sweeps most of us off our feet. People want to sell when Mr. Market is depressed and buy when he is manic. To be a successful trader, you must stand apart from the crowd. You need to define objective criteria that will help you decide how high is too high and how low is too low. Buffett makes his decisions on the basis of fundamental analysis and a fantastic gut feel. Traders can use the tools of technical analysis described in this book.

What stocks will you trade? There are more than 20,000 of them in the United States, and even more abroad. Beginners tend to spread themselves too thin. Afraid to miss an opportunity, they buy scanning software. A person who doesn't have a clear idea of how to trade a single stock will not be helped by tracking thousands. He'll be much better off focusing on a handful of stocks and following them every day.

We'll return to the question of stock selection in Part 10 “Practical Details.” In brief, it's a good idea to limit your pool of trading candidates. That group can be small or large, depending on your skills and available time. A Greek friend of mine calls his watch list of 200 stocks his harem. He's owned every one of them in the past; he reviews them on weekends, selecting fewer than ten that he may take for a spin in the coming week.

I have two “pools” in which I fish for trading ideas. On weekends, I run the 500 component stocks of the S&P 500 through my divergence scanner and zoom in on stocks flagged by that scan, selecting a handful that I'll consider trading during the coming week. Second, I review Spike picks on weekends, figuring that among a dozen top traders submitting their favorite picks, there is bound to be at least one that I'll want to piggyback. The number of stocks I closely monitor during the week is always in single digits. This is just my style; I have friends who monitor several dozen stocks at any given time. Only you can tell what number is right for you, but you should track only as many as you can focus on.

43. ETFs

An exchange-traded fund (ETF) is an investment vehicle that trades like a stock. Different ETFs hold different types of assets, such as stocks, commodities, or bonds, and they usually trade close to their net asset values. There are ETFs designed to track indexes, sectors, countries, commodities, bonds, futures, and forex. The leveraged ETFs are designed to move double or triple the distance of the underlying index. There are also inverse ETFs and leveraged inverse ETFs that trade opposite to their underlying assets: when an index falls, its inverse ETF rises and vice versa. The number of ETFs has reached thousands in recent years.

With so many choices, what's there not to like about ETFs? Actually, quite a lot.

The industry keeps quiet about the fact that there are two ETF markets. The primary market is reserved for “authorized participants”—large broker-dealers who have agreements with the ETF distributors to buy or sell large blocks, consisting of tens of thousands of ETF shares. These middlemen buy at wholesale and then sell to you at retail. You, as a private trader, always sit in the back of the bus—in the secondary market.

An active trader friend who reviewed this chapter added: “I believe that ‘authorized participants’ can also obtain ETF shares to short in large lots. My broker always tells me there are none available, not even of broadly held ETFs, which I can't imagine they don't have lots of in inventory. When I ask them about this, they stonewall. I wonder how such a shorting transaction by an authorized participant is accounted for. I wonder if it somehow ends up as paired transactions (both an up-volume purchase and a down-volume sale, cancelling each other out). If so, the added selling pressure would be hidden from view.”

Administrative expenses incurred by ETFs dampen investors' returns. According to a study by Morgan Stanley, ETFs missed their 2009 targets by an average of 1.25%, which was double the size of their “miss” in 2008. Those percentages are your “haircuts” for the privilege of trading ETFs rather than individual stocks. The more exotic the index tracked by an ETF, the greater your “haircut.”

Some ETFs lose value so fast that their issuers repeatedly perform reverse splits in order to raise prices back into double digits. With the passage of time, those ETFs sink back into single digits, and then their issuers perform another reverse split to make their ETFs appeal to new suckers.

A friend of mine lost over a million dollars last year: he anticipated a market decline and bought an ETF of a volatility index (volatility rises when markets fall). Sure enough, the market dropped 10% and volatility spiked—but his ETF went down instead of up (Figure 43.1).

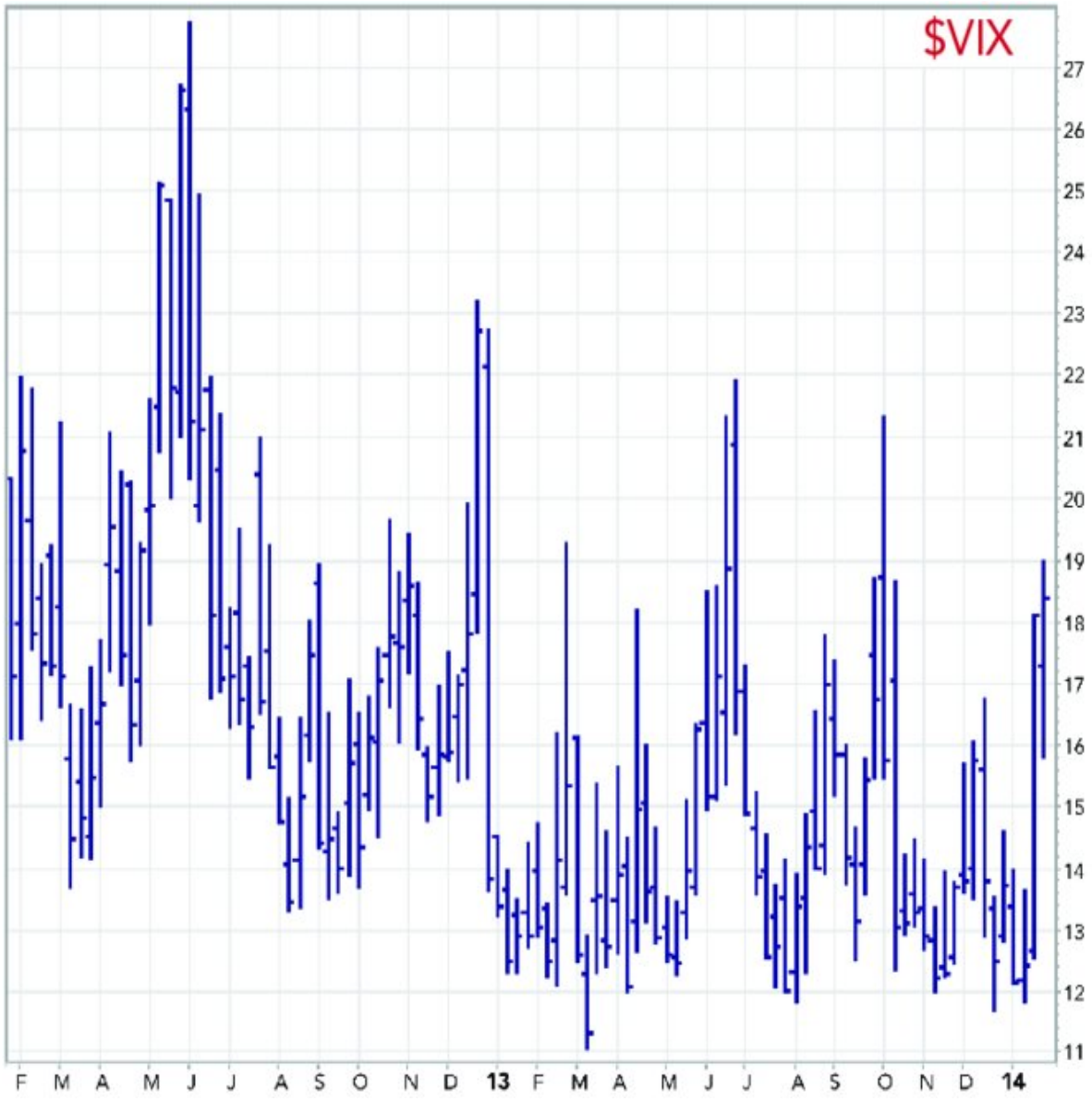


Figure 43.1 $VIX, the volatility index, and VXX, a volatility ETF, weekly. *(Charts by Stockcharts.com)*

Tracking Volatility: Reality and Fantasy

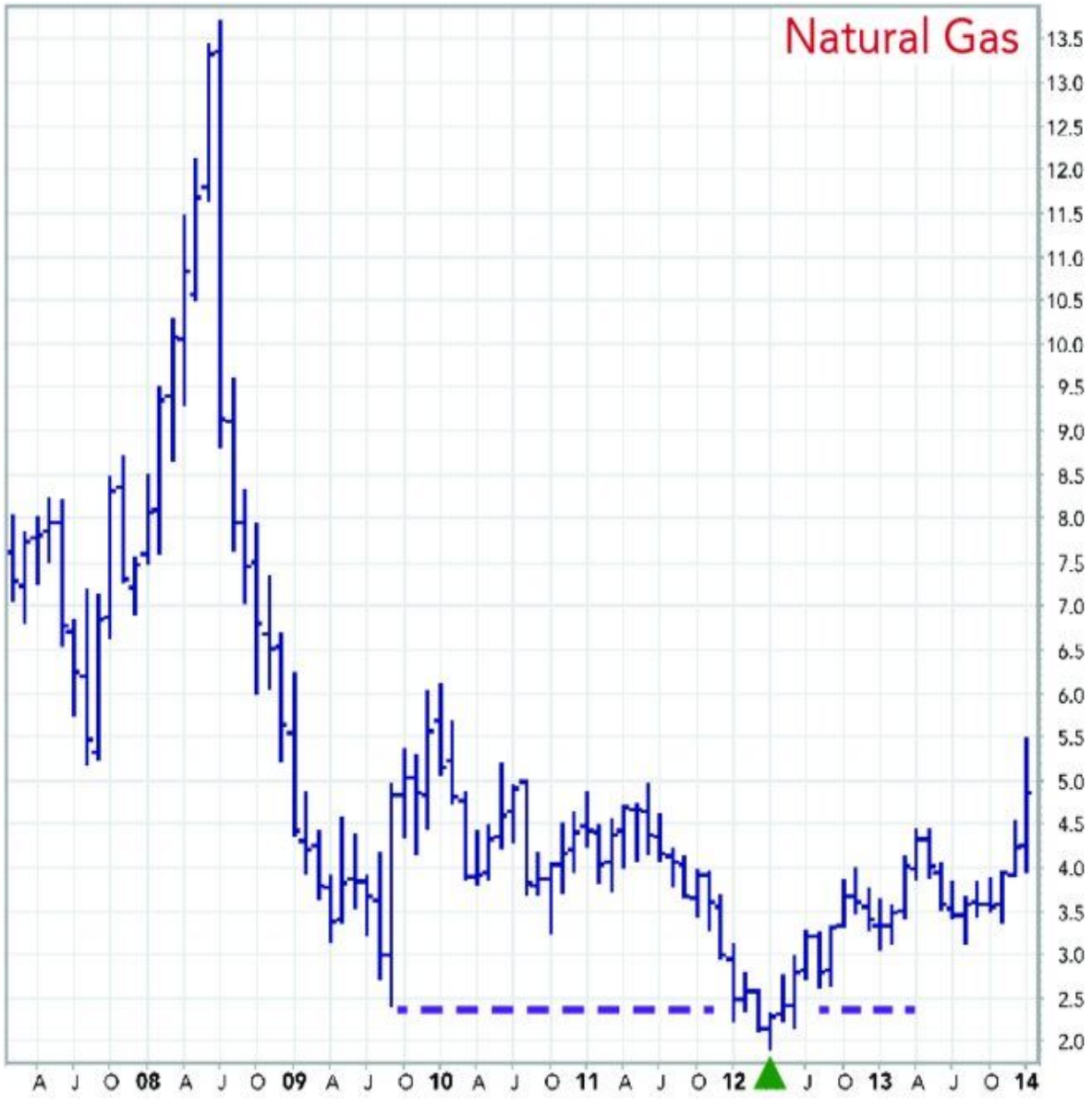
Can you believe that these two charts, covering the same period of time, are supposed to track the same thing?

Volatility is a hugely important factor in market movements. Just as prices oscillate between uptrends and downtrends, they oscillate between periods of low and high volatility. This is why many analysts and traders pay close attention to $VIX—the volatility index. The chart on the left shows that during the past two years $VIX oscillated between the low teens and mid-

twenties (it briefly rallied above $80 during the 2008 bear market). Traders have a saying: “when VIX is high, it's safe to buy; when VIX is low, go slow.”

Since $VIX fluctuations appear fairly orderly, some traders attempt to trade it using several ETFs, such as VXX, shown on the right. During the same time, VXX has steadily declined, losing 90% of its value. How's that for tracking volatility?

Many ETFs “track” their underlying indexes in a shabby manner. After giving commodity ETFs a try, I wouldn't touch them with a ten-foot pole, having experienced several days during which the underlying commodity went up, while my commodity ETFs went down. I stopped trading country ETFs after running into several situations in which a country index would rise to a new high, while my ETF would stay well below the breakout level (Figure 43.2).


Natural Gas
13.5
13.0
12.5
12.0
11.5
11.0
10.5
10.0
9.5
9.0
8.5
8.0
7.5
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5.5
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4.5
4.0
3.5
3.0
2.5
2.0
A J O 08 A J O 09 A J O 10 A J O 11 A J O 12 J O 13 A J O 14

Figure 43.2 Natural Gas Spot and UNG, a natural gas ETF, monthly. *(Charts by Stockcharts.com)*

Natural Gas Market: Reality and Fantasy

The chart on the left shows prices of the natural gas spot market: it topped out near $13.5 in 2008 and began a bear market that ended with a double bottom. A false downside breakout near $2 in 2012 helped identify a buying opportunity. A futures chart (not shown) looks very similar to the spot chart —but take a look at UNG, the natural gas ETF on the right. As it slid interminably from above $500 to below $20, I lost count of the number of friends and clients who complained of losing money trying to pick its bottom.

The leveraged ETFs are more “futures-laden” than non-leveraged ETFs and have much greater rollover losses each month. The disadvantages that retail investors suffer are magnified in the leveraged ETFs. They may track their underlying vehicles more or less correctly during a single trading session, but deviate widely with the passage of time.

The only ETFs that trade more or less decently are broadly based ones, such as SPY and QQQ. Overall, ETFs attract many unsophisticated retail clients, but the pervasive haircuts and poor tracking of the underlying securities slant the field against them. Remember an important principle: TANSTAFL —”there ain't no such thing as a free lunch.” When it comes to ETFs: buyer beware.

44. Options

An option is a derivative instrument—a bet that another security, such as a stock, an index, or a future will reach a certain price by a certain date. A **call** gives its holder a right, but not an obligation, to buy a certain quantity of a specified security at a specified price at a specified time. It is a bet on a price increase. A **put** is a right, but not an obligation, to sell a certain quantity of a specified security at a specified price at a specified time. It is a bet on a price drop. There are two parties in every options trade: a buyer and a seller, also called a writer. Buyers buy options, while writers create options and sell them to buyers.

The key point to keep in mind is that option buyers as a group lose money over time, despite occasional lucky trades. At the other end of the table, options writers as a group make steady money despite occasional losses.

Writers create options out of thin air to meet demand from option buyers. One of my students, a market-maker on the floor of the American Stock Exchange, said to me: “Options are a hope business. You can buy hope or sell hope. I am a professional—I sell hope. I come to the floor in the morning and find what the public hopes for. Then I price that hope and sell it to them.”

Each option has an exercise price (also called strike price). If a stock fails to reach that price before the exercise date, the option expires worthless and the buyer loses what he paid, while the writer keeps his loot, whose polite name is premium.

- An option is **at-the-money** when the current price of the underlying security equals the exercise price.
- A call is **out-of-the-money** when the current price of the underlying security is below the exercise price. A put is out-of-the-money when the current price of the underlying is above the exercise price. The farther out-of-the-money, the cheaper the option.
- A call is **in-the-money** when the current price of the underlying security is above the exercise price. A put is in-the-money when the current price of the underlying is below the exercise price.

An option can be at-the-money, out-of-the-money, or in-the-money at different times in its life, as the price of the underlying security fluctuates. The price of every option has two components—an intrinsic value and a time value.

- An option's **intrinsic value** rises above zero only when it's in-the-money. If the exercise price of a call is $80 and the underlying security rises to $83, the intrinsic value of your call will be $3. If the security is at or below $80, the intrinsic value of that call is zero.
- The other component of an option's price is **time value**. If the stock trades at $74 and people pay $2 for an $80 call, the entire $2 represents time value. If the stock rises to $83, and the price of the call jumps to $4, $3 of that is intrinsic value ($83 – $80), while $1 is time value (the hope that this stock will rise even higher during the remaining life of that option).

Option prices depend on several factors:

- The farther out-of-the-money the exercise price, the cheaper the option—the underlying security must travel a longer distance to make the option worth anything before it expires.
- The closer the expiration day, the cheaper the option—it has less time to fulfill the hope. The speed with which an option loses value is called "time decay," which doesn't occur in a straight line but becomes steeper as the expiration nears.
- The less volatile the underlying security, the cheaper the option, because it has a smaller chance of making a large move.
- Minor factors influencing option prices include the current level of interest rates and the dividend rate of the underlying stock.

Different factors that impact option pricing may clash and partly cancel each other out. For example, if a market drops sharply, reducing the value of calls, the increased volatility will lift option values, and the calls may lose less than expected. There are several mathematical models, such as Black-Scholes, widely described in options literature, that are used to determine what is called a fair value of any option.

Buying Options

The simplest and easiest approach to options is to buy them. That's exactly what beginners do, and unless they learn quickly and change, their accounts are doomed.

This is the standard line of brokerage house propaganda: “Options offer leverage—an ability to control large positions with a small outlay of cash. The entire risk of an option is limited to the price you pay for it. Options allow traders to make money fast when they're right, but if the market reverses, you can walk away and owe nothing!” They fail to mention that in order to profit from buying an option you must be right in three ways. You must choose the right stock, predict the extent of its move, and forecast how fast it'll get there. If you're wrong on even one of these three choices, you'll lose money.

Ever tried tossing a ball through three rings at an amusement park? This triple complexity makes buying options a losing game.

A stock, an index, or a future can do one of three things: rise, fall, or stay flat. When you buy a call, you can profit only if the market rises; you lose if it goes down or stays flat. You can lose even if it rises, but not fast enough. When you buy a put, you win only if the market falls fast enough. An option buyer makes money only if the market goes his way at a good enough speed, but loses if it moves his way slowly, stays flat, or goes against him.

An option buyer has one chance out of three to win—but the odds are two out of three in favor of an option writer. No wonder the pros write options. A pro sells a call, and if a stock drops, stays flat, or even rises slowly, that call will expire worthless, and he'll keep the premium. He sells poor buyers hope—and as that hope turns out to be worthless, he keeps their money.

Options attract hordes of small traders who can't afford to buy stocks. To get a bigger bang for their buck, they buy calls as if those were substitutes for stocks. This doesn't work because options move differently from stocks. Gullible amateurs buy empty hopes, which the pros are delighted to sell to them.

Beginners, gamblers, and undercapitalized traders make up the majority of option buyers. Just think of all the money those hapless folks lose in their eagerness to get rich quick. Who gets all that money? Some of it goes for brokerage commissions, but the bulk flows into the pockets of option

writers. Well-capitalized professionals write options rather than buy them. Option writing is a capital-intensive business: you need hundreds of thousands of dollars at a minimum to do it right, and most successful writers operate with millions. Writing options is a serious game for knowledgeable, disciplined, and well-capitalized traders. If your account is too small for option writing, wait until it grows bigger.

Markets are like pumps that suck money out of pockets of the poorly informed majority and into the wallets of a savvy minority. Smart traders in any market look for situations in which the majority does something one way, while a small, moneyed minority does the opposite. Options are a great example of this rule.

Writing Options

There are two main types of option writing. Covered writers buy a stock and write options against it. Naked writers write calls and puts on stocks they don't own.

Covered writers own underlying securities. For example, a fund may hold a large position in IBM stock and sell calls against it. If the stock doesn't rise to the exercise price during the life of those calls, the options will expire worthless. The covered writer will add his premium to the fund and write a new call with a new expiration date. If IBM does rise to the exercise price and “gets called,” they'll deliver their stock at its strike price, collect the money, and use the freed-up capital to buy another stock and write calls against it.

Large funds tend to use computerized models for buying stocks and writing covered calls. Covered writing is a mathematically demanding, capital-intensive business. Most serious players spread their costs, including staff and equipment, across a large capital base. A small trader doesn't have much of an edge in this expensive enterprise. Covered writing was very profitable in the early years of exchange-traded options. By now the field is very crowded, and the returns have become thinner.

Naked writers sell options without owning their underlying securities; they back up their writes with cash in their accounts. A naked writer collects his premium when he opens a trade, but his risk is unlimited if that position goes against him. If you own a stock, sell a covered call, and that stock rises to its exercise price and gets called, you have something to deliver. If you sell a

naked call and the stock rises to or above its exercise price, you'll have to pay. Imagine selling calls on a stock that becomes a takeover play and opens $50 higher the next morning—you still have to deliver.

This combination of limited rewards with unlimited risks scares most traders away from naked writing—but as usual, there's a gap between perception and reality. A far-out-of-the-money option with a short time to the expiration is very likely to expire worthless, meaning the writer will profit. The risk/reward ratio in naked writing is better than it looks, and there are techniques for reducing the impact of a rare adverse move.

Savvy naked writers tend to sell out-of-the-money calls and puts whose underlying stocks or futures are unlikely to reach their strike prices during the remaining life of an option. They sell not just hopes but distant hopes. Good writers track volatility to find how far a stock is likely to move and then sell options outside of that range. This game goes into high gear during the week or two prior to option expiration, when the floor mints money out of thin air, selling naked puts and calls that have almost no chance of reaching their exercise price.

Cautious writers close their positions without waiting for the expiration dates. If you write a call at 90 cents and it goes down to 10 cents, it makes sense to buy it back and unwind your position. You've already earned the bulk of potential profit, so why expose yourself to continued risk? It's cheaper to pay another commission, book your profits, and look for another writing opportunity.

Becoming a naked writer requires iron discipline. The size of your writes and the number of positions must be strictly determined by your money management rules. If you sell a naked call and the stock rallies above its exercise price, it exposes you to the risk of ruin. You must decide in advance at what level you will cut and run, taking a relatively small loss. A naked seller cannot afford to sit and hope when a stock moves against him.

Writer's Choice

Time is the enemy of options buyers. Every buyer has lived through this sad sequence: they buy a call, the stock rises, but their option fades to zero, and they lose money. Buyers lose when the underlying security takes longer than expected to get to the level at which they can collect on their bet. Most options become worthless by their expiration date.

What if we reverse this process and write rather than buy options? The first time you write an option, and do it correctly, you'll experience the delicious sensation of time working in your favor. The option that you wrote loses some of its time value each day, making the premium you've collected safer. When the market goes nowhere, you still make money, as time value keeps evaporating, making it more likely that you'll keep the premium.

If living well is the best revenge, then taking a factor that kills most options buyers—time—and making it work for you is a gratifying experience.

Since each option represents a hope, it's better to sell empty hopes which are unlikely to be fulfilled. Take three steps before writing a call or a put:

1. Analyze the security against which you want to write options.
   Use Triple Screen to decide whether a stock, future, or an index is trending or non-trending. Use weekly and daily charts, trend-following indicators, and oscillators to identify trends, detect reversals, and set up price targets. Avoid writing when earnings are about to be announced—do not hold open positions during those potentially stormy days.
2. Select the type of option to write.
   If your analysis is bearish, consider writing calls, but if bullish, consider writing puts. When the trend is up, sell the hope that it will turn down, and when it's down, sell the hope it'll turn up. Do not write options when markets are flat and premiums low—a breakout from a trading range can hurt you.
3. Estimate how far, with a generous safety margin, the stock would have to run in order to change its trend. Write an option beyond that level. Write an option with a strike price the market is unlikely to reach before the option expiration. An objective tool that shows the degree of safety of your planned position is an indicator called Delta, which we'll discuss below.

Time Decay Options lose value with each passing day, but their rate of decay isn't steady. Options drop faster as the expiration date draws closer. Like a boulder rolling downhill, time decay becomes vertical at the final cliff.

Time decay is bad for option buyers, but very good for option writers. You collect your premium the day you sell a call. The deeper it falls below the

price at which you wrote it, the safer your premium. Time decay is a friend of the option writer but an enemy of the option buyer.

With that in mind, the sweet spot for an option writer is approximately two to three months from option expiration. That's when time decay starts gathering speed. It accelerates in the last few weeks of the option's life. When you write options close to the expiration, you benefit from faster time decay. You can get more money for options with longer lives, but don't be greedy. The goal of a writer is not to make a killing on any single trade but to grind out steady income.

Delta is a tool that shows the probability of the underlying security reaching your option's exercise price by its expiration date. It's one of several options tools, collectively called the “Greeks” (each is named after a letter of the Greek alphabet). You can find Delta for any stock, index, or ETF on many financial websites, especially those of brokerages that offer options services.

A cautious option writer should aim to sell calls or puts whose Delta isn't much above 0.10, meaning there is only a 10% chance of the exercise price getting hit before the expiration date. Remember, as an option writer you don't want the underlying security to reach that price: you want to sell empty hopes. If 10% risk seems high, keep in mind that Delta is derived without any reference to market analysis. If your decision is based on good technical analysis, your risk will be lower than what Delta indicates.

The temptation to sell naked options closer to the money and get fatter premiums is dangerous. The Delta is likely to be high, meaning that a slight counter-trend move can push your position underwater. If you're going to write options, treat it like writing accident insurance policies. To make steady profits and sleep well at night, sell your auto insurance policies to ladies who only drive to supermarkets rather than to motorcycle daredevils.

Limiting Risk

A big options trader shared with me his technique of “slicing the bid-ask spread.” He puts in a low bid or a high ask and then starts giving up a penny at a time until somebody bites. For example, he recently saw an option he wanted to write (i.e., sell). The bid was $1.18 and the ask $1.30, but he had no intention of selling at $1.18 and paying that huge spread. Instead, he put in his order to sell a large number of contracts at $1.29, a penny cheaper than the ask. No response. A few minutes later he lowered his ask to $1.28—and

suddenly a buyer materialized, snapped up his contracts, and then the bid-ask spread went back to $1.18/$1.30. My client finds there are large traders watching from the sidelines, not showing their hand, but willing to trade within the spread. He gets them to bite by giving up a penny at a time.

Option writers can get hurt in one of three ways. Some overtrade, creating positions that are too large for their accounts. Assuming too much risk makes them nervous and unable to hold positions through any wiggles. Option writers also get hurt when they fail to run fast enough when an option moves against them. Finally, option writers can get blown out if they don't have a reserve against a major adverse move. The longer you trade, the greater the risk of a catastrophic event.

A writer can grow careless selling naked options and pocketing profits. A smug feeling of self-satisfaction can blind him to reality. You must protect all trades, including naked options. Several suggestions:

- Set your profit-taking zone—consider buying back your naked options. The option you write is a wasting asset. When the underlying security moves far from the exercise price but there is still time left to the expiration, the price of the option you sold may fall near its rock bottom and lose value in tiny dribs and drabs. The loser who bought that option still has a bit of a chance that the market may reverse in his favor. He continues to hold that option like a lottery ticket—and once in a rare while his ticket may win.
  As a writer, why hold an open position that has already given you most of its potential profit? You have little to gain, while remaining exposed to risk. After the option you sold loses half of its value, consider buying it back to close your profitable trade. By the time an option loses 80% of its value, you should be out of that trade.
- Use a mental stop-loss on the option you sold.
  It is better to use mental stops here because many pros go fishing for stops of thinly traded options. Using mental stops requires iron discipline—another reason why option writing isn't a beginners' game. Set your mental stops both on the underlying security and the option itself. For example, you may sell a naked April 80 call on a stock trading at 70 and place your mental stop at 75. Get out of your naked option position before it gets into the money. Also, set a stop on your

option: if it doubles in price, buy it back to cut the loss. If you sold an option for $1.50, buy it back if it rises to $3. It may hurt, but it'll be nowhere near the “unlimited loss” that makes people afraid to write options.

- Open an insurance account.
  You may write a put and the market crashes the next day, or you write a call and suddenly there is a takeover. You hope this never happens—but trade long enough and eventually everything will happen! That's why you need insurance. Nobody will write it for you, so you'll have to self-insure.
  Open a money market account, and every time you close out a profitable naked writing position, throw 10 percent of your profit into that account. Do not use it for trading—let your insurance account grow with each new profit, ready to cover a catastrophic loss or to be taken out in cash when you stop writing options. In a recent consultation with a professional option writer, I recommended that he send 10% of his profit above a certain threshold to the bank that holds the mortgage on his country house, using that prepayment as his insurance fund.

Can Option Buying Be Intelligent?

Professionals may buy puts on a rare occasion when they expect a severe drop. When a long-term uptrend begins to turn, it can create massive turbulence near the top, similar to an ocean liner changing its course. When volatility goes through the roof, even well-heeled traders have trouble setting stops on shorts. Buying puts allows you to sidestep this problem.

Prices tend to fall twice as fast as they rise. Greed, the dominant emotion of uptrends, is a happy and lasting feeling. Fear, the dominant emotion of downtrends, is sharper and more violent. Professionals are more likely to buy puts because of shorter exposure to time decay. Uptrends are better traded with stocks or futures.

A trader who expects a downswing must decide what put to buy. The best choice is counterintuitive and quite different from what most people get.

- Estimate how low you expect a stock to collapse. A put is worth buying only if you expect a crash.

- Avoid puts with more than two months of life. Buying puts makes sense only when you expect a waterfall decline. If you anticipate a drawn-out downtrend, better sell short the underlying security.
- Look for cheap puts whose price reflects no hope. Move your finger down the column: the lower the strike, the cheaper the put. At first, each time you drop to the next strike price, a put is 25% or even 35% cheaper than at the previous level. Eventually you come to the strike level at which you would save only a tiny fraction of a put's price. This shows that all hope has been squeezed out of that put, and it is priced like a cheap lottery ticket. That's the one you want!

Buying a very cheap, far-out-of-the-money put is counterintuitive. It is so far out of the money and has so little life left in it that it's likely to expire worthless. You can't place a stop on it, and if you're wrong, the entire premium will go up in smoke. Why not buy a put closer to the money?

The only time to buy a put is when you're shooting for an exceptional gain from a major reversal. In an ordinary downtrend it's better to short stocks. With cheap far-out-of-the-money puts you aim for a tenfold gain or better. Returns like these allow you to be wrong on a string of such trades, yet come out ahead in the end. Catching one major reversal will make up for several losses and leave you very profitable.

Why don't more people use this tactic? First, it requires a great deal of patience, as opportunities are very infrequent. The entertainment value is very low. Most people can't stomach the idea of being wrong three, four, or five times in a row, even if they are likely to make money in the end. That's why so few traders play this game.

I wrote this chapter to sharpen your focus on some of the key options ideas. If interested in options, study Lawrence MacMillan's book *Options as a Strategic Investment*.

45. CFDs

A **contract for difference** (CFD) is a bet on the future value of a currency, an index, or a stock. If you buy a CFD and the price of the underlying vehicle rises, you'll collect the difference from the company that sold you the contract, but if it falls, you'll pay the difference. CFDs are derivatives that allow speculators to bet on rallies or declines. They are similar to spread betting, which is legal in the United Kingdom and Ireland, but not in the United States.

At the time of this writing, CFDs are available in Australia, Canada, France, Germany, Hong Kong, Ireland, Italy, Japan, the Netherlands, New Zealand, Norway, Poland, Portugal, Singapore, South Africa, Spain, Sweden, Switzerland, and the United Kingdom. They are prohibited in the United States, due to restrictions by the Securities and Exchange Commission.

CFDs were invented in the early 1990s by Brian Keelan and Jon Wood, both of UBS Warburg in London. Institutional traders began using them to hedge stock exposure and to avoid taxes. In the late 1990s, several firms began marketing CFDs to retail traders, touting their leverage and the exemption from UK taxes. Several provider firms expanded their offerings from the London Stock Exchange to global stocks, commodities, bonds, and currencies. Index CFDs, based on the major global indexes such as Dow Jones, S&P 500, FTSE, and DAX, quickly became the most popular vehicles of the group.

CFDs are contracts between individual traders and providers, who may offer different deal terms. Each CFD is created by opening a trade with a provider, based on some underlying instrument. Be prepared to pay large bid-ask spreads, commissions, and overnight financing. Trades are mostly short-term, although positions can be taken overnight. Financing charges and profits or losses are credited or debited daily. CFDs are traded on margin.

Among the pluses of CFDs are the tiny minimum sizes of those contracts, making them accessible to small traders. The absence of the expiration dates means there is no time decay. While financing is charged on long positions, it is paid out on short positions.

There are several serious misgivings about the CFDs. Commissions tend to be high relative to contract sizes. Bid-ask spreads are controlled by CFD

issuers, who also control prices of contracts, which may deviate from prices of the underlying securities. In other words, a retail customer plays against a professional team that can move the goal posts during the game.

A client from New Zealand wrote: “Regarding CFDs and spread betting, it is worth understanding that with CFDs you are not just trying to beat the market but the casino too. CFD providers can set whatever prices they like for an instrument, as it is their instrument. The fact that sometimes it emulates what happens in the stock market does not mean it is the same as trading in the stock market.”

CFDs are heavily marketed to new and inexperienced traders, extolling their potential gains, while glossing over risks. The Australian financial regulator ASIC considers trading CFDs riskier than gambling on horses or in casinos. CFDs are banned in the United States where regulators haven't forgotten the bucket shops that flourished at the turn of the twentieth century.

The stance of the SEC in this matter reminds me of another federal agency, the Food and Drug Administration, which kept Thalidomide, a drug for pregnant women, out of the United States. As a result, after the full scale of its horrible side effects became known, the U.S. population was spared an epidemic of deformed babies that was caused by that drug in Europe.

46. Futures

A future is a contract for delivery of a specific quantity of a commodity by a certain date at an agreed-upon price. Futures contracts differ from options by being binding on both the buyer and the seller. In options, the buyer has the right but not an obligation to take delivery. If you buy a call or a put, you can walk away if you like, but in futures, you have no such luxury. If the market goes against you, you have to get out of your trade at a loss or add to your margin. Futures are stricter than options, but their responses to market volatility are much smoother, making them easier to trade. Another advantage of futures is that there are only a few dozen of them, making them easier to track. Futures are not nearly as correlated with each other as stocks. While stocks tend to move as a group, many futures move in unrelated trends, offering more trading choices.

Commodities are the irreducible building blocks of the economy. Wheat is a commodity, while bread isn't because it includes multiple components. Old-timers used to joke that a commodity was something that hurt when you dropped it on your foot—gold, sugar, wheat, a barrel full of crude oil. In recent decades, many financial instruments began to trade like commodities —stock indexes, bonds, and currencies. Futures include financial instruments along with traditional commodities.

The person who buys a stock becomes a part owner of a company, but when you buy a futures contract, you don't own anything. You enter into a binding contract for a future purchase of merchandise, be it a carload of wheat or a sheaf of Treasury bonds. The person who sells you that contract assumes the obligation to deliver. The money you pay for a stock goes to the seller, but in futures your margin money stays at the clearinghouse as a security, to ensure you'll accept delivery when your contract comes due. That's why they used to call margins “honest money.” While in stocks you pay interest for margin borrowing, in futures you can collect interest on your margin funds.

Each futures contract has a definite size and a settlement date. Most traders close out their contracts early, settling profits and losses in cash. Still, the existence of a delivery date forces people to act, providing a reality check. A person may sit on a losing stock for years, deluding himself that it's only a paper loss. In futures, reality, in the form of the settlement date, always intrudes on a daydreamer.

Most futures have daily limits beyond which prices are not allowed to go. Limits are designed to interrupt hysterical moves and give people time to rethink their positions. A string of limit days can be very stressful when a losing trader is stuck and unable to get out while his account is being ground down. The globalization of the futures markets has created many emergency exits, allowing you to unwind a trade elsewhere. Just like when boarding a plane, a careful trader learns to identify those emergency exits before he needs them.

In stocks, most people buy and very few sell short. In futures, just like in options, the size of long and short positions is always equal because if someone buys a contract for future delivery, someone else has to sell it to him, i.e., go short. If you want to trade futures, it pays to be comfortable shorting.

The survival rate for new futures traders is low—nine out of ten newcomers are said to bust out in the first few months. It is important to understand that the danger is not in futures but in a gross lack of risk-management skills among beginners. Futures offer some of the best profit opportunities to serious traders but are deadly for amateurs. You must develop excellent money-management skills (described in Chapters 49–51) before venturing into futures.

Futures and Cash Trades

To compare a futures trade with a cash trade, let's assume the following: it is February, gold is trading at $1,500 an ounce, and your analysis indicates that it's likely to rise to $1,575 within weeks. With $150,000, you can buy a 100-oz gold bar from a dealer and store it in a safe. If your analysis is correct, in a few weeks your gold will be worth $157,500. You can sell it and take $7,500 profit, or 5% before commissions—nice. Now let's see what happens if you trade futures based on the same analysis.

Since it is February, April is the next delivery month for gold. One futures contract covers 100 oz of gold, with a value of $150,000. The margin to trade this contract is only $7,500. In other words, you can control $150,000 worth of gold with a $7,500 deposit. If your analysis is correct and gold rallies $75 per ounce, you'll make roughly the same profit as when you bought 100 oz of gold for cash; only now your return will be 100% on your investment instead of 5%, since your margin is only $7,500.

Many people, after seeing such numbers, feel a surge of greed and buy multiple contracts. A trader with $150,000 in his account has enough margin for 20 contracts. If he can double his money on a single contract, he can double it on 20. If he repeats it two or three times, he'll quickly become a millionaire.

Wonderful—but there is a catch.

Markets seldom move in a straight line. Your analysis may well be correct, and gold may rise from $1,500 to $1,575 within a few weeks, but it's perfectly possible that it may dip to $1,450 along the way. That $50 dip would create a $5,000 paper loss if you bought 100 oz of gold for cash—unpleasant but not a tragedy. For a futures trader who bought multiple contracts, each on a $7,500 margin, that $50 decline would mean a wipeout. His broker would call demanding more margin, and if he has no reserves, the broker will sell him out at a loss.

Inexperienced traders keep buying too many contracts and keep getting kicked out by the first wiggle of their market. Their analysis may be correct—gold may rise to its target price—but the beginner is doomed because he commits too much of his equity and has very thin reserves. Futures don't kill traders—poor money management kills futures traders.

Futures can be very attractive for traders with strong money-management skills. High rates of return demand ice-cold discipline. A beginner is better off with slower-moving stocks. Once you've matured as a trader, you can take a closer look at futures. Also, read some introductory books. *Winning in the Futures Market* by George Angell is a good primer, to be followed by *The Futures Game* by Teweles and Jones.

Hedging

Futures markets serve an important economic function: they permit commercial producers and consumers to hedge commodity price risks, giving them a competitive advantage. At the same time, futures offer speculators a gambling palace with more choices than any casino.

Hedging means opening a futures position opposite to one's position in the actual commodity. For example, a major candy manufacturer knows months in advance how much sugar the firm is going to need. He buys a corresponding number of sugar futures in New York or London when prices

are good enough for the firm. They'll be needing trainloads of sugar several months from now, but meanwhile they hold sugar futures, which they plan to sell when they buy their cargoes.

If sugar prices go up and they have to pay more for the raw commodity, they will offset that loss by making roughly the same profit on their futures position. If sugar prices fall, they'll lose money on their futures contracts but make it up in savings on the raw materials. Their unhedged competitors are taking chances. If sugar prices fall, they'll buy on the cheap and reap a windfall, but if prices rise, they'll be hung out to dry. Hedged consumers can concentrate on running their core businesses, insulated from future price swings. Airlines know years in advance how much jet fuel they'll need, and buying oil futures protects them from price spikes that often occur in this volatile market.

Producers of commodities also benefit from hedging. An agribusiness can presell its wheat, coffee, or cotton when prices are high enough to assure profits. They sell short enough futures contracts to cover the size of their prospective crop. From that point on, they have no price risk. If prices go down, they'll make up their losses on cash commodity by profits on short futures trades. If prices go up, they'll lose money on their short futures positions but make it back selling the actual commodity at higher prices.

Hedging removes price risk from planning to buy or to deliver a cash commodity. It allows commercial interests to concentrate on their core businesses, offer stable consumer pricing, and obtain a long-term competitive advantage.

Hedgers give up a chance of a windfall but insulate themselves from price risks. Survivors value stability. That why the Exxons, the Coca-Colas, and the Nabiscos of the world are among the major players in commodity markets. Hedgers are the ultimate insiders, and a good hedging department not only buys price insurance, but also serves as a profit center.

Hedgers transfer price risks to speculators who enter the markets, lured by the glitter of potential profits. It's ironic that hedgers, who have inside information, are not fully confident about prices, while crowds of cheerful outsiders plunk down money to bet on futures.

The two largest groups of speculators are farmers and engineers. Farmers produce commodities, while engineers love to apply scientific methods to

the futures game. Many farmers enter futures markets as hedgers but catch the bug and start speculating. It never ceases to amaze me how many farmers end up trading stock index futures. As long as they trade corn, cattle, or soybeans, their feel for the fundamentals gives them an edge over city slickers. But what's their edge in the S&P500?

Supply, Demand, and Seasonality

Major bull and bear markets in futures are driven by supply or demand. Supply-driven markets tend to be fast and furious, while demand-driven markets tend to be quiet and slow. Why? Think of any commodity, say coffee, which grows in Africa and South America.

Changes in demand come slowly, thanks to the conservatism of human nature. The demand for coffee can increase only if drinking becomes more popular, with an espresso machine in every bar. The demand can fall off if coffee drinking becomes less popular, due to a deteriorating economy or in response to a health fad. Demand-driven markets move at a leisurely pace.

Now imagine that a major coffee growing area is hit by a hurricane or a freeze. Suddenly the world supply of coffee is rumored to be reduced by 10% and prices shoot up, cutting off marginal consumers. Imagine a new OPEC policy sharply curtailing crude oil supply or a general strike in a leading copper-mining country. When a commodity's supply is reduced or even rumored to be reduced, its price climbs, reallocating tight supplies to those best able to afford them.

Grain prices often spike during spring and summer planting and growing seasons, as dry spells, floods, and pests threaten supplies. Traders say that a farmer loses his crop three times before harvesting it. Once the harvest is in and the supply is known, demand becomes the driving force. Demand-driven markets have narrower channels, with smaller profit targets, and lower risks. As seasons change, channels have to be redrawn, and trading tactics adjusted. A new trader may wonder why his tools stopped working. A smart trader gets out a new set of tools for the season and puts old ones in storage until next year—just as he swaps regular and snow tires on his car.

A futures trader must know the key supply and demand factors of the market he's trading. For example, he must keep an eye on the weather during the critical growing and harvesting months in agricultural commodities. Trend

traders in the futures markets tend to look for supply-driven markets, while swing traders can do just as well in demand-driven markets.

Most commodities fluctuate through the seasons. Freezing spells in the United States are bullish for heating oil futures. Orange juice futures used to have wild run-ups during the frost season in Florida, but have become much more sedate due to the increase of orange production in Brazil in the Southern hemisphere. Seasonal trades take advantage of such swings, but you have to be careful because those cycles are seldom identical. Be sure to put your seasonal trades through the filter of technical analysis.

Floors and Ceilings

Commodities, unlike stocks, rarely trade below certain price floors or above price ceilings. The floor depends on the cost of production. When the price of a commodity, be it gold or sugar, falls below that level, miners stop digging and farmers stop planting. Some third-world governments, desperate for dollars and trying to avoid social unrest, may subsidize production, paying locals in a worthless local currency and dumping their product on the world market. Still, if enough producers close up and quit, the supply will shrink, and prices will have to rise to draw in new suppliers. If you look at a 20-year chart of most commodities, you'll see that the same price areas have served as a floor year after year.

The ceiling depends on the cost of substitution. If the price of a commodity rises, major industrial consumers will start switching away from it. If soybean meal, a major animal feed, becomes too expensive, the demand will switch to fishmeal, and if sugar becomes too costly, the demand will switch to corn sweeteners.

Why don't more people trade against those levels? Why don't they buy near the floor and short near the ceiling, profiting from what is similar to shooting fish in a barrel? First of all, neither the floor nor the ceiling is set in stone, and markets may briefly violate them. Even more importantly, the human nature works against those trades. Most speculators don't have the courage to short a market that's boiling near record highs or go long a market after it has crashed.

Contango, Inversion, and Spreads

All futures markets offer several contracts for different delivery months. For example, you can buy or sell wheat for delivery in September or December of this year, March of next year, and so on. Normally, the nearby months are cheaper than the remote ones, and that relationship is called a contango market.

Higher prices for more remote deliveries reflect the “cost of carry”—financing, storing, and insuring a commodity. The differences between delivery months are called premiums, and hedgers closely watch them. When supply tightens or demand increases, people start paying up for the nearby months, and the premium for the faraway months begins to shrink. Sometimes the front months become more expensive than faraway months—the market becomes inverted! There is a real shortage out there, and people are paying extra to get their stuff sooner. This so-called “inversion” is one of the strongest signs of a bull market in a commodity.

When you look for inversions, keep in mind that there is one market in which inversion is the norm. Interest rate futures are always inverted because those who hold cash positions keep collecting interest instead of paying finance and storage charges.

Professionals don't wait for inversions—they monitor the narrowing or widening of premiums. A good speculator can rattle off the latest prices, but a floor trader will quote you the latest premiums. A savvy trader knows by heart the normal spreads between different delivery months.

Hedgers tend to dominate the short side of the markets, most speculators are perpetual bulls, but floor traders love to trade spreads. Spreading means buying one delivery month and selling another in the same market. It also means going long one market while shorting a related one.

If the price of corn, a major animal feed, starts to rise faster than the price of wheat, at some point ranchers will start using wheat rather than corn. They'll reduce their purchases of corn, while buying more wheat, pushing their spread back towards the norm. Spread traders bet against deviations and for a return to normalcy. In this situation, a spreader will short corn and buy wheat, instead of taking a directional trade in either market.

Spread trading is safer than directional trading and has lower margin requirements. Amateurs do not understand spreads and have little interest in these reliable but slow-moving trades. There is not a single book on spreads

I can recommend, a sign of how well professionals have sown up this area of knowledge and kept the outsiders out. This is one of a handful of niches in the markets where professionals are earning high incomes without the benefit of a single good how-to book.

Commitments of Traders

Brokers report their clients' positions to the Commodity Futures Trading Commission (CFTC), which strips away personal data and releases summaries to the public. Their Commitments of Traders (COT) reports are among the best sources of information on what the smart money is doing in the futures markets.

COT reports reveal positions of three groups—hedgers, big traders, and small traders. Hedgers identify themselves to brokers because that entitles them to several advantages, such as lower margin deposits. Big traders are those who hold the number of contracts above the “reporting requirements,” set by the government. Whoever is not a hedger or a big trader is a small trader.

In the old days, big traders used to be the smart money. Today, the markets are bigger, the reporting requirements much higher, and big traders are likely to be commodity funds, most of them not smarter than run of the mill traders. The hedgers are today's smart money, but understanding their positions isn't as easy as it seems.

For example, a COT report may show that in a certain market, hedgers hold 70% of shorts. A beginner who thinks this is bearish may be completely off the mark if he doesn't know that normally hedgers hold 90% of shorts in that market, making the 70% stance wildly bullish. Savvy COT analysts compare current positions to historical norms and look for situations where hedgers, or the smart money, and small traders, many of whom are gamblers, are dead set against each other. If you find that in a certain market the smart money is overwhelmingly on one side, while the small specs are mobbing the other, it is time to use technical analysis to look for entries on the side of hedgers.

Margins and Risk Control

Futures' low margin requirements make them more rewarding than stocks but also much more dangerous. When buying stocks in the United States, you must put up at least half of their cash value with the broker giving you a

margin loan for the rest. If you have $40,000 in your account, you may buy $80,000 worth of stocks, and no more. This margin limit was implemented after the Crash of 1929 when it became clear that low margins led to excessive speculation, which contributed to the viciousness of declines. Prior to 1929, speculators could buy stocks on a 10% margin, which worked great in bull markets but forced them to liquidate when prices slid, pushing the market lower during bear markets.

Margins of only three to five percent are common in the futures markets, allowing traders to make huge bets with little money. With $40,000 in your account, you may control about a million dollars' worth of merchandise, be it pork bellies or stock index futures.

For example, if gold trades at $1,500/oz and you buy a 100-oz contract on a $7,500 margin and catch a $75 price move, you'll gain 100%. A beginner looks at these numbers and exclaims, “where have I been all my life?” He thinks he's found a royal road to riches. But there is a catch. Before that market rises $75, it may dip $50. That meaningless blip will trigger a margin call and force a small speculator's account to go bust—despite his correct forecast.

Easy margins attract adrenaline junkies who quickly go up in smoke. Futures are very tradable—but only if you follow strict money management rules and don't go crazy with easy margins. Professionals put on small initial positions and pyramid them if a trade moves in their favor. They keep adding new contracts while moving stops beyond breakeven.

When you become interested in futures, it's a good idea to make your first steps in those markets where you know something about the fundamentals. If you are a cattle rancher, a house builder, or a loan officer, then cattle, lumber, or interest rate futures would be logical starting points. If you have no particular interests, make your first steps in relatively inexpensive markets. In the United States, corn, sugar, and, in a slow year, copper can be good markets for beginners. They are liquid, volatile, and not too expensive.

We'll return to the futures markets in Part 9, “Risk Management.” There you'll find which contracts you may or may not trade, depending on their price and volatility as well as your account size.

Futures traders with small accounts sometimes trade mini-contracts. For example, a regular contract of gold represents 100 oz of the yellow metal,

but a mini-contract covers only 20 oz. Mini-contracts trade during the same hours as regular contracts and closely track their prices. Their commissions are similar to those for regular contracts, taking a proportionately bigger bite from each trade. Their slippage tends to be bigger due to lower volumes. The exceptions are stock index futures, where mini contracts have higher volumes than regular ones.

47. Forex

The currency market is the largest asset class in the world by trading volume, with a turnover of over $4 trillion per day. Currencies trade around the clock—from 20:15 GMT on Sunday to 22 GMT on Friday, stopping only on weekends. While some currency trades serve the hedging needs of importers and exporters, most transactions are speculative.

The United States is the only country in the world where most people don't think much about currencies. The moment an American sets foot abroad, he realizes that everyone, from executives to taxi drivers, watches the exchange rates. When people outside the United States get their hands on a bit of trading capital, often their first idea is to trade forex.

The forex market has no central location. Institutions deal in the interbank market, trading with each other using online platforms, such as Bloomberg or Reuters. Unless you can trade $10 million of spot forex at a pop, you'll be trading retail, going through a broker.

Most beginners open accounts at forex shops where they immediately run into a fatal flaw—your broker is your enemy. When you trade stocks, futures, or options, your broker is your agent: he executes your trades for a fee, and that's the end of it. Not so in most forex (as well as CFD) houses, where your broker is likely to take the opposite side of every trade. You and the forex house are now against each other: if you lose, your broker will profit, and if you win, he'll lose. Since the house holds most of the cards, it has many ways to achieve the desired result.

Most forex houses “bucket” customer orders—accept them without executing any trades. They charge spreads, commissions, interest, etc. for non-existent trades. I received the clearest explanation of their game from a chatty head dealer at a major European forex house (which is now expanding worldwide, with branches in the United States—I see their billboards in New York).

That forex house accepts any trade in any currency pair, whether long or short, but always shifts the bid-ask spread to put itself at an advantage from the get-go. Those so-called “trades” never go anywhere—they're only kept as electronic entries in the firm's books. The forex house charges interest if its customers take their phantom “positions” overnight, even though there is

never any position, since the house simply holds the opposite side of each trade. The only time the firm goes to the legitimate market is when multiple client orders cluster on the same side of the same currency pair in excess of a million dollars—that's when the house hedges its own exposure in the real market.

When you trade stocks, options, or futures, your broker buys or sells on your behalf, earning a commission for this service, and doesn't care whether you win or lose. This is great, because he has no incentive to push you into losing. On the other hand, a forex house that buckets your orders wants you to lose, so that it can win. In addition to shifting bid-ask spreads and charging interest on non-existent positions, it may even charge a daily "resettlement fee"—the full bid-ask spread for every day you hold a trade.

Forex shops help ensure their clients' demise by offering homicidal leverage. I've seen them offer leverage of 100:1 and even 400:1. A newcomer who scrapes together a $1,000 stake can suddenly control a position worth a hundred thousand dollars. This means that the slightest price wiggle against him is guaranteed to wipe out his equity. That's why those shops confidently keep clients' money in-house, never transmitting their trades to the real market—why share the loot with anyone else? They are so certain of their clients' demise that many compensate employees with a percentage of the client deposits that they bring in—funds deposited with a forex house are as good as theirs.

"The market has long been plagued by swindlers preying on the gullible," according to *The New York Times*. "The average individual foreign-exchange-trading victim loses about $15,000, according to CFTC records," writes *The Wall Street Journal*. Currency trading "has become the fraud du jour," according to Michael Dunn of the U.S. Commodity Futures Trading Commission.

In August 2008, the CFTC set up a special task force to deal with growing foreign exchange fraud. In January 2010, the CFTC identified a "number of improper practices" in the retail foreign exchange market, "among them solicitation fraud, a lack of transparency in the pricing and execution of transactions, unresponsiveness to customer complaints, and the targeting of unsophisticated, elderly, low net worth and other vulnerable individuals." It proposed new rules limiting leverage to 10 to 1.

Frauds may include churning customer accounts, selling useless software, improperly managing “managed accounts,” false advertising, and Ponzi schemes. All the while, promoters claim that trading foreign exchange is a road to profits.

The real forex market is a zero sum game, in which well-capitalized professional traders, many of whom work for banks, devote full-time attention to trading. An inexperienced retail trader has a significant information disadvantage. The retail trader always pays the bid-ask spread, which lowers his odds of winning. Retail forex traders are almost always undercapitalized and subject to the problem of “gambler's ruin.” Even in a fair game between two players, the one with the lower amount of capital has a higher probability of going bust in the long run.

Having observed forex shops for decades, I was amused to see what my best student did when he became interested in forex. This multimillionaire stock trader decided to check out forex houses by opening large accounts and then waiting for the night, when forex trading was at its thinnest. That's when he placed his orders, always of a very unusual and atypical size, and watched the tape. There were only two houses that showed his orders on tape—the rest, apparently, got bucketed.

I enjoy trading currencies, but wouldn't go near a forex house. Instead, I trade electronic currency futures. That's what I recommend to anyone interested in trading foreign exchange. Futures brokers work for you, not against you; futures spreads are more narrow, commissions more reasonable, and no interest is charged for the privilege of holding a position. There are contracts for most major currency pairs and even mini-contracts for euro/dollar and yen/dollar.

One of the real challenges of currencies is that they move around the clock. You may enter a trade, analyze it in the evening, and decide to take profits the following day. When you wake up, there are no profits to be taken. The turning point you saw coming has already come and gone, only not in the United States, but in Asia or Europe. Someone had picked your pocket while you slept!

Major financial institutions deal with this problem by using the system of “passing the book.” A bank may open a position in Tokyo, manage it intraday, and then transfer it to its London branch before closing for the night. London continues to manage that and other positions, and in the

evening passes the book to New York, which manages it until it passes it back to Tokyo. Currencies follow the sun, and small traders can't keep up with it. If you trade currencies, you either need to take a very long-term view and ignore daily fluctuations, or else day-trade and avoid overnight positions.

PART 9

Risk Management

A good trading system delivers greater profits than losses over a period of time, but even the most carefully designed system doesn't guarantee success in every trade. No system can assure you of never having a losing trade or even a series of losing trades.

A system is a plan, but as Helmuth von Moltke, a nineteenth-century German field marshal, wrote: “No plan survives contact with the enemy.” The U.S. boxer Mike Tyson, quoted by *The Economist*, put it more bluntly: “Everyone has a plan 'til they get punched in the mouth.” This is why risk control must be an essential part of every trading system.

The inability to manage losses is one of the worst pitfalls in trading. Beginners freeze like deer in the headlights when a deepening loss starts wiping out profits of many good trades. It's a general human tendency to take profits quickly but wait for losing trades to come back to even. By the time the despairing amateur gives up hope and closes his trade with a terrible loss, his account is badly and sometimes irreparably damaged.

To be a successful trader, you need to learn risk management rules and firmly implement them.

48. Emotions and Probabilities

Money stirs up powerful feelings. The emotional storms, raised by making or losing money, hit our trading.

A beginner rushing to place an order may feel giddy with the excitement. He will soon find out that the market offers a painfully expensive form of entertainment. Early in my career, I heard from a professional trader that “successful trading should be a little bit boring.” He spent long hours each day doing homework, sifting through market data, calculating risks, and maintaining records. Those time-consuming tasks weren't exciting—but his success was built on such grunt work. Beginners and gamblers get a full load of entertainment, but pay for it with losses.

Another emotional mistake is counting money in open trades. Newbies dream about what they can buy with open profits or freeze from the shock of comparing open losses to their paychecks. Thinking about money interferes with decision making. Professionals focus on managing trades; they count money only after those trades are closed.

A trader who counts profits in an open trade is like a lawyer who, in the middle of a trial, starts dreaming of what he'll buy with his fee. That trial is still going on, his opponents are building a case against his client, and counting money will not help him win—quite the contrary, it'll distract him and cause him to lose. An amateur who becomes upset counting losses in an open trade is like a surgeon who throws a tray of instruments after the patient on the table starts bleeding—his frustration will not improve the outcome of the case.

Professional traders don't count money in open trades. They do it at the end of an accounting period, such as a month.

If you were to ask me about an open trade, I could answer that it's a bit ahead, a lot ahead, or a bit behind (a lot behind is unlikely because of my stops). If you were to press me for a number, I might tell you how many ticks I'm ahead or behind, but I'll never translate those ticks into dollars. It took me years to train myself to break the destructive habit of counting money in open trades. I can count ticks, but my mind stops before converting them into dollars. It's like being on a diet—there is plenty of food around, but you don't touch it.

Focus on managing your trade, and the money will follow almost as an afterthought.

Another key point: a professional doesn't get worked up about his wins or losses in a single trade. There is a great deal of randomness in the markets. We can do everything right—and still end up with a losing trade, just like a surgeon can do everything right and still lose a patient. That's why a trader should care only about having a method with a positive expectation and work on being profitable at the end of his accounting period.

The goal of a successful professional in any field is to reach his personal best—to become the best doctor, the best lawyer, or the best trader. Handle each trade like a surgical procedure—seriously, soberly, without sloppiness or shortcuts. Concentrate on trading right. When you work this way, money will come later.

Why Johnny Can't Sell

Your survival and success depend on your willingness to cut losses while they're relatively small.

When a trade starts going against a beginner, he hangs on, hoping for a reversal in his favor. When he gets a margin call, he scrambles to send more money to the broker, as if the initial loss hadn't been bad enough. Why should a losing trade turn in his favor? There's no logical reason, only wishful thinking.

Stubbornly holding a losing trade only deepens the wound. Losses have a way of snowballing until what initially seemed like a bad loss starts looking like a bargain because the current drawdown is so much worse. Finally, a desperate loser bites the bullet and closes out a trade, taking a severe loss.

Right after he exits, the market reverses and comes roaring back.

The trader is ready to smash his head against a wall—had he hung on, he would have made money. Such reversals happen time and again because most losers respond to the same stimuli. People have similar emotions, regardless of their nationality or education. A frightened trader with sweaty palms and a pounding heart feels and acts the same way, whether he grew up in New York or Hong Kong and whether he had 2 or 20 years of schooling.

The intellectual demands of trading are modest, but its emotional demands are immense. Many years ago, a highly educated but very emotional trader

showed me how to trade divergences near channel walls. I fine-tuned his method, added risk management rules, and continue to make money with it to this day. The man who taught me had busted out because of his lack of discipline and ended up going door to door, selling aluminum siding. Emotional trading and impulsivity are not good for success.

Roy Shapiro, a New York psychologist from whose article the title of this subchapter is borrowed, writes: “With great hope, in the private place where we make our trading decisions, our current idea is made ready…. one difficulty in selling is the attachment experienced toward the position. After all, once something is ours, we naturally tend to become attached to it…. This attachment to the things we buy has been called the “endowment effect” by psychologists and economists and we all recognize it in our financial transactions as well as in our inability to part with that old sports jacket hanging in the closet. The speculator is the parent of the idea…. the position takes on meaning as a personal extension of self, almost as one's child might…. Another reason that Johnny does not sell, even when the position may be losing ground, is because he wants to dream…. For many, at the moment of purchase, critical judgment weakens and hope ascends to govern the decision process.”

Dreaming in the markets is a luxury we can't afford.

Dr. Shapiro describes a test that shows how people conduct business involving a chance. First, a group of people are given a choice: a 75 percent chance to win $1000 with a 25 percent chance of getting nothing—or a sure $700. Four out of five subjects take the second choice, even after it is explained to them that the first choice leads to a $750 gain over time. The majority makes the emotional decision and settles for a smaller gain.

Another test is given: People have to choose between a sure loss of $700 or a 75 percent chance of losing $1000 and a 25 percent chance of losing nothing. Three out of four take the second choice, condemning themselves to lose $50 more than they have to. In trying to avoid risk, they maximize losses!

Emotional traders crave certain gains and turn down profitable wagers that involve uncertainty. They go into risky gambles to postpone taking losses. It is human nature to take profits quickly and losses slowly. The irrational behavior increases when people feel under pressure. According to Dr.

Shapiro, at the racetrack, “bets on long shots increase in the last two races of the day.”

Prof. Daniel Kahneman writes in his book *Thinking, Fast and Slow*: “The sure loss is very aversive, and this drives you to take the risk … Considerable loss aversion exists even when the amount at risk is minuscule relative to your wealth … losses loom larger than corresponding gains.” He adds: “Animals, including people, fight harder to prevent losses than to achieve gains” and spells it out: “People who face very bad options take desperate gambles, accepting a high probability of making things worse in exchange for a small hope of avoiding a large loss. Risk taking of this kind often turns manageable failures into disasters.” Why do we act this way? Prof. Kahneman explains: “Except for the very poor, for whom income coincides with survival, the main motivators of money-seeking are not necessarily economic. Money is a proxy for points on a scale of self-regard and achievement.” These rewards and punishments, promises and threats, are all in our heads.

Emotional trading destroys losers. A review of trading records usually shows that the worst damage was done by a few large losses or a long string of losses, while trying to trade one's way out of a hole. The discipline of good money management would have kept us out of that hole in the first place.

Probability and Innumeracy

Innumeracy—the inability to count or understand the basic notions of probability—is a fatal weakness for traders. The counting skills aren't hard, can be picked up from many basic books, and then sharpened with some practice.

The lively book *Innumeracy* by John Allen Paulos is an excellent primer on the concepts of probability. Paulos describes being told by a seemingly intelligent person at a cocktail party: “If the chance of rain is 50 percent on Saturday and 50 percent on Sunday, then it is 100 percent certain it will be a rainy weekend.” Someone who understands so little about probability is sure to lose money trading. You owe it to yourself to develop a grasp of the basic mathematical and logical concepts involved in trading.

There are very few ironclad certainties in market analysis, which is largely based on probabilities. “If the signals A and B are present, then the outcome C will occur” is not the kind of logic that holds up in the markets.

Ralph Vince begins his important book *Portfolio Management Formulas* with this delightful paragraph: “Toss a coin in the air. For an instant you experience one of the most fascinating paradoxes of nature—the random process. While the coin is in the air there is no way to tell for certain whether it will land heads or tails. Yet over many tosses, the outcome can be reasonably predicted.”

Mathematical expectation is an important concept for traders. Each trade has either a positive expectation, also called the player's edge, or a negative expectation, also called the house advantage, depending on who has better odds in a game. If you and I flip a coin, neither of us has an edge—each has a 50 percent chance of winning. If you play the same game in a casino that takes five percent from every pot, you'll win only 95 cents for every dollar you lose. This “house advantage” will create a negative mathematical expectation. No system for money management can beat a negative expectation over a period of time.

A Positive Expectation

A skilled card-counter has an edge against a casino, unless they detect him and throw him out. Casinos love drunken gamblers but hate card counters. An edge lets you win more often than lose over a period of time. Without an edge, you might as well give money to charity. In trading, the edge comes from systems that deliver greater profits than losses, after slippage and commissions, over a period of time. Acting on hunches leads to losses.

The best trading systems are simple and robust. They have very few elements. The more complex the systems, the higher the risk that some of its components will break.

Traders love to optimize systems, making them fit past data. The trouble is, your broker won't let you trade in the past. Markets change, and indicator parameters that would have nailed the trends last month are unlikely to nail them a month from now. Instead of optimizing your system, try to de-optimize it. A robust system holds up well to market changes and beats a heavily optimized system in real trading.

Finally, once you develop a good system, stop messing with it. If you like to tinker, design another system. As Robert Prechter put it: “Most traders take a good system and destroy it by trying to make it into a perfect system.”

Once you have a trading system that works, it's time to set the rules for money management. You can win only if you have a positive mathematical expectation from a sensible trading system. Money management will help you exploit a good system, but cannot rescue a bad one.

Businessman's Risk or Loss

We analyze markets in order to identify trends. Be careful not to become overconfident when anticipating future prices. The future is fundamentally unknowable. When we buy, expecting a rally, it is entirely possible that an unforeseen event may flip the market and send it down. Your actions in response to surprises will define you as a trader.

A pro manages his trades, accepting what's called a “businessman's risk.” This means that the amount he risks exposes him to only a minor equity drop. A loss, on the other hand, may threaten an account's health and even survival. We must draw a clear line between a businessman's risk and a loss. That border is defined by the fraction of the account a trader puts at risk in a trade.

If you follow the risk management rules described below, you'll accept only a normal businessman's risk. Violating a well-defined red line will expose you to dangerous losses.

“This time is different,” says an undisciplined trader. “I'll give this trade a little extra room.” The market seduces traders into breaking their rules. Will you follow yours?

Once, I chaired a panel at a gathering of money managers at which one of the presenters had nearly a billion dollars in his fund. A middle-aged man, he got into this business in his 20s, while working for a naval consulting firm after graduate school. Bored with his day job, he designed a trading system but couldn't trade it because it required a minimum of $200,000, which he didn't have in those days. “I had to go to other people,” he said, “and ask them for money. Once I explained to them what I was going to do and they gave me money, I had to stick to my system. It would have been unconscionable to deviate from the system I told them I would follow. My poverty worked for me.” Poverty and integrity.

49. The Two Main Rules of Risk Control

If trading is a high-wire act, then safety demands stringing a net underneath that wire. If we slip, the net will save us from getting smashed against the floor. The only thing better than a safety net is two safety nets: if one doesn't catch us as we fall, the other will.

Even the best planned trades can go awry because of randomness in the markets. Even the best analyses and the clearest trade setups can't prevent accidents. What you can control is risk. You do it by managing the size of your trades and the placement of stops. This is how you keep the inevitable losses small, not allowing them to cripple your account, so that you can win in the long run.

Ugly losses stick out like sore thumbs from most account records. Every performance review shows that a single terrible loss or a short string of bad losses did most of the damage to an account. Had a trader cut his losses sooner, his bottom line would have been much higher. Traders dream of profits but freeze when a losing trade hits them. If you follow risk management rules, you'll quickly get out of harm's way instead of waiting and praying for the market to turn.

Markets can snuff out an account with a single horrible loss that effectively takes a person out of the game, like a shark bite. Markets can also kill with a series of bites, none of them lethal but combined they strip an account to the bone, like a pack of piranhas. The two pillars of money management are the 2% and 6% Rules. The 2% Rule will save your account from shark bites and the 6% Rule from piranhas.

The Two Worst Mistakes

There are two quick ways to ruin an account: not use stops and put on trades that are too large for that account's size.

Trading without stops exposes you to unlimited losses. In the following chapters, we'll discuss the principles and rules of risk control, but they will work only if you use stops.

There are several methods for setting stops, and we'll discuss them in Chapter 54. We want to place our stops neither too far nor too close. At this point, just keep in mind that you must use stops. You have to know your

maximum level of risk—it's as simple as that. If you don't know your maximum level of risk, you're flying blind.

The other fatal error is overtrading—putting on trades whose size is too large for your account. This is like putting a huge sail on a small boat—a strong gust of wind will flip the boat over instead of making it go faster.

People put on trades that are too large for their accounts out of ignorance, greed, or a combination of both. There is a simple mathematical rule that gives you the maximum size for every trade, as you are about to see.

50. The Two Percent Rule

One disastrous loss can do to an account what a shark does to a hapless swimmer. A poor beginner who loses a quarter of his equity in a single trade is like a swimmer who just lost an arm or a leg to a shark and is bleeding into the water. He'd have to generate a 33% return on the remaining capital simply to come back to even. The chances of him being able to do that are slim to none.

The typical victim of a “shark bite” loses more money. He loses confidence and becomes fearful of pulling the trigger. The way to avoid “shark bite” losses is by following the 2% Rule. It will limit your losses to a manageable size—to a normal businessman's risk.

The 2% Rule prohibits you from risking more than 2% of your account equity on any single trade.

For example, if you have $50,000 in your account, the 2% Rule limits your maximum risk on any trade to $1,000. This is not the size of your trade—it's the amount you put at risk, based on the distance from your entry to your stop.

Let's say you decide to buy a stock for $40 and put a stop at $38, just below support. This means you'll be risking $2 per share. Dividing your total permitted risk of $1,000 by your $2 risk per share tells you that you may trade no more than 500 shares. You are perfectly welcome to trade fewer shares—you don't have to go the max every time. If you feel very bullish about that stock and want to trade the maximum permitted size, that number of shares will be limited to 500.

Good market analysis alone will not make you a winner. The ability to find good trades will not guarantee success. Markets are full of good analysts who destroy their accounts. You can profit from your research only if you protect yourself from sharks.

I've seen traders make 20, 30, and once even 50 profitable trades in a row, and still end up losing money. When you're on a winning streak, it's easy to feel you've figured out the game. Then a disastrous loss wipes out all profits and tears into your equity. You need the shark repellent of good money management.

A good trading system will give you an edge in the long run, but in the short run there is a great deal of randomness in the markets. The outcome of any single trade is close to a toss-up. A professional trader expects to be profitable by the end of the month or the quarter, but ask him whether he'll make money on his next trade and he'll honestly say he doesn't know. That's why he uses stops: to prevent negative trades from damaging his account.

Technical analysis can help you decide where to place a stop, which will limit your loss per share. Money management rules will help you protect your account as a whole. The single most important rule is to limit your exposure on any trade to no more than 2% of your account.

This rule applies only to money in your trading account. It doesn't include your savings, equity in your house, retirement account, or Christmas club. Your trading capital is the money you've dedicated to trading. This is your true risk capital—the equity in your trading enterprise. If you have separate trading accounts for stocks, futures, and options, apply the 2% Rule to each account separately.

I've noticed a curious difference in how people react when they first hear about the 2% Rule. Newbies with small accounts often object that this number is too low. Someone asked me whether the 2% Rule could be increased when he was feeling especially confident about a trade, and I answered that it would be like adding extra length to the cord for bungee jumping because you like the view from the bridge.

Professionals, on the other hand, often say that 2% is too high and they try to risk less. You wouldn't want to lose 2% of a million dollars on a single trade in one day. A hedge fund manager who consulted with me said that his project for the next six months was to increase his trading size. He never risked more than 0.5% of equity on a trade—and was going to teach himself to risk 1%. Good traders tend to stay well below the 2% limit. Whenever amateurs and professionals are on the opposite sides of an argument, you know which side to choose. Try to risk less than 2%—it is simply the maximum level.

Measure your account equity on the first day of each month. If you start the month with $100,000 in your account, the 2% Rule allows you to risk a maximum of $2,000 per trade. If you have a good month and your equity rises to $105,000, then your 2% limit for the next month will be—what? Quick! Remember, good traders can count! If you have $105,000 in your

account, the 2% Rule allows you to risk $2,100 and trade a slightly bigger size. If, on the other hand, you had a bad month and your equity fell to $95,000, the 2% Rule will set your maximum permitted risk at $1,900 per trade for the following month. The 2% Rule links the size of your trades to your performance as well as account size.

The Iron Triangle of Risk Control

How many shares will you buy or sell short in your next trade? Beginners often choose an arbitrary number, such as a thousand or 200 shares. They may buy more if they've made money in their latest trade or less if they've lost money.

In fact, trade size should be based on a formula instead of vague gut feel. Use the 2% Rule to make rational decisions on the maximum number of shares you may buy or sell short in any trade. I named this process “The Iron Triangle of risk control” (Figure 50.1).

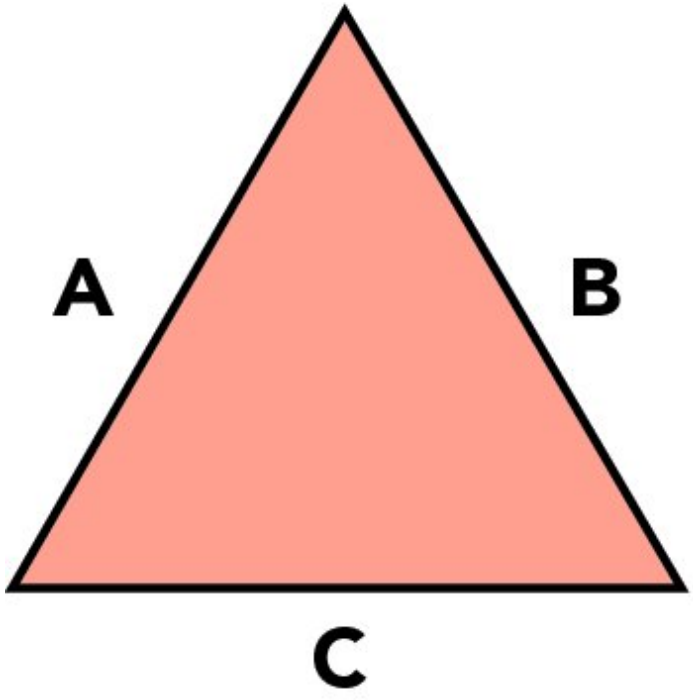


Figure 50.1 The Iron Triangle of risk control.

Construct the Iron Triangle in three steps:

1. Your maximum dollar risk for the trade you're planning (never more than 2% of your account).
2. The distance, in dollars, from your planned entry to your stop—your maximum risk per share.
3. Divide “A” by “B” to find the maximum number of shares you may trade. You aren't obligated to trade this many shares, but you may not trade more than this number.

For example, when I volunteered to teach a yearlong course “Money and Trading” in a local high school and wanted to make the experience real for the kids, I opened a $40,000 account. I told my students that if, at the end of the school year, we made money, I'd give half the profit to their school and distribute the rest among class participants. I also told them that their maximum risk per trade was one percent. A kid would stand up in class and make a case for buying Nokia at $16, with a stop at $14.50. “How many shares may we trade?”—I'd ask. With the maximum risk of $400 per trade and $1.50 risk per share, the kids would be allowed to buy 250 shares, with some leeway for commissions.

If you have a tiny account, you may end up trading the maximum permitted number of shares each time. As your account grows bigger, you may want to vary the size of your trades: say a third of the maximum for regular trades, two thirds for extra strong trades, and the full amount for exceptional trades. Whatever you do, the Iron Triangle of risk control will set the maximum number of shares you may trade.

The 2% Rule in the Futures Markets

A trader recently asked me how he could apply the Iron Triangle of risk control to trading e-mini futures in his $50,000 account. I replied:

1. If you are trading a $50k account, the 2% Rule would limit your risk on any trade to $1,000. Let's say you want to be conservative and risk only 1% of that account, or $500. That will be the first side of “the Iron Triangle of risk Control.”
2. Suppose you look at your favorite e-minis and want to sell a contract short at 1810, with a profit target at 1790 and a stop at 1816. You'll be risking 6 points, and since one point in e-minis is worth $50, your total

risk will be $300 (plus commissions and possible slippage). That will be the second side of your Iron Triangle of risk control.

3. Close the triangle by dividing “a” by “b” to find the maximum size you may trade. If your maximum risk is $500, then one contract, but if $1,000, then three.

Please meet two futures traders, Mr. Hare and Mr. Turtle, each with a $50,000 account. The agile Mr. Hare sees that the average daily range in gold is about $30, worth $3,000 per day for a single contract. The daily range in corn is about 10 cents, worth $500 per day for a single contract. He thinks that if he can catch just half of a day's range, he'll make $1,500 per contract in gold, while the same level of skill will bring him only $250 in corn. Mr. Hare logs into his brokerage account and buys two contracts of gold.

The cautious Mr. Turtle has a different arithmetic. He begins by using the 2% Rule to cap his maximum risk per trade at $1,000. He sees that it would be impossible to place a meaningful stop while trading gold which can move $3,000 a day. To buy gold in his account would be like grabbing a very large tiger by a very short tail. If, on the other hand, he trades corn, he'll have good staying power. That tiger is smaller and has a longer tail, which he can wrap around his wrist. Mr. Turtle buys a contract of corn. Who do you think is more likely to win in the long run, Mr. Hare or Mr. Turtle?

Futures markets are more deadly than stocks not because of any special complexity. Sure, they have some specific angles, but those aren't too hard to learn. Futures kill traders by seducing them with paper-thin margins. They offer enormous leverage –ability to trade large positions on a 5% margin. This works wonders when the market moves in your favor, but it slices your wallet when the market turns against you.

You can succeed in futures only with sensible risk control, using the 2% Rule.

1. Calculate 2% of your account value—this will be the maximum acceptable risk level for any trade. If you have $50,000 in your futures account, the most you can risk is $1,000.
2. Examine the charts of the market that interests you and write down your planned entry, target, and stop. Remember: a trade without these three

numbers is not a trade but a gamble. Express the value of the move from your entry to your stop in dollars.

3. Divide A by B, and if the result turns out to be less than one, no trade is permitted—it means you cannot afford to trade even one contract.

Let's review two market examples, featuring similar chart patterns (Figure 50.2). Let's assume you have a $50,000 account, which permits you to risk the maximum of $1,000 per trade.

Figure 50.2 Daily charts with 13- and 26-day EMAs and Autoenvelopes. The Impulse system and MACDHistogram 12-26-9. (*Charts by Tradestation*).

The 2% Rule in Futures—Silver and Wheat

Suppose you want to buy silver at the right edge of this chart. Prices have traced a double bottom with a false downside breakout. MACD-Histogram has traced a bullish divergence. The Impulse system has turned blue, permitting buying. The nearby futures contract trades at $21.415 a few minutes before the close.

You decide that if you buy, your profit target will be near $23, halfway from the EMA to the upper channel line. Your stop will be at $20.60, the level of the latest low. You'll be risking $0.815/oz trying to make about $1.585/oz—a 2:1 reward/risk ratio, an acceptable number.

Are you allowed to take this trade? Absolutely not! That $0.815/oz risk per contract translates into $4,075 total risk, since one contract covers of 5,000 ounces of silver. Remember, your maximum permitted risk is $1,000. If you're eager to take this trade, you may buy a single mini-contract. It covers only 1,000 ounces of silver, meaning you'll risk $815. Best wishes for that sensible trade.

Now, suppose you're interested in buying wheat at the right edge of this chart. Its technical picture looks similar: a double bottom with a bullish divergence of MACD-Lines and MACD-Histogram. The Impulse system has turned blue, permitting buying. Shortly before the close, prices are near 658 cents.

You decide that if you enter there, your target will be near 680 cents, near the upper channel line. Your stop will go to 652 cents, the level of a recent low. You'll be risking 10 cents/bu, trying to make about 22 cents/bu—a reward/risk ratio of 2:1, similar to that of silver.

Are you allowed to take this trade? Yes! That 10 cent risk per contract translates into $500 total risk, since the contract covers 5,000 bushels of wheat. Remember, your maximum permitted risk is $1,000. If you're very bullish, you may even buy two contracts.

You must keep in mind that when trading futures the technical pictures of different markets may look similar, but you must base your decisions to trade or not to trade on money management rules.

You can trade futures reasonably safely only with strict money management. The leverage of futures can work for you—as long as you stay away from those contracts that can kill your account.

A professional futures trader surprised me early in my career when he told me he spent a third of his time on risk management. Beginners jump into trades without giving them much thought. Intermediate-level traders focus on market analysis. Professionals dedicate a massive proportion of their time to risk control—and take money away from beginners and amateurs.

If you cannot afford to trade a certain market, you can still download its data, do your homework, and paper trade it as if you were doing it with real money. This will prepare you for the day when your account grows big enough or the market grows quiet enough for you to put on a trade.

51. The Six Percent Rule

A piranha is a tropical river fish not much bigger than a man's hand, but with a mean set of teeth. What makes it so dangerous is that it attacks in packs. If a dog, a donkey, or a person stumbles into a tropical stream, a pack of piranhas can attack with such a mass of bites that the victim collapses. A bull can walk into a river, be attacked by a pack of piranhas, and a few minutes later only its bones will be left in the water. A trader, who keeps sharks at bay with the 2% Rule, still needs protection from piranhas. The 6% Rule will save you from being nibbled to death.

Most of us, when we find ourselves in trouble, start pushing harder. Losing traders often take on bigger positions, trying to trade their way out of a hole. A better response to a losing streak is to step aside and take time off to think. The 6% Rule sets a limit on the maximum monthly drawdown in any account. If you reach it, you stop trading for the rest of the month. The 6% Rule forces you to get out of the water before piranhas get you.

> **The 6% Rule prohibits you from opening any new trades for the rest of the month when the sum of your losses for the current month and the risks in open trades reach 6% of your account equity.**

We all go through periods when we are in tune with the markets, taking one profit after another. When everything we touch turns to gold, that's the time to trade actively.

There are other times when everything we touch turns into a completely different substance. We go through periods when our systems go out of sync with the market, delivering one loss after another. It's important to recognize such dark periods and not push yourself but rather step back. A professional on a losing streak is likely to take a break, continue to monitor the market, and wait to get in gear with it again. Amateurs are more likely to keep pushing until their accounts become crippled. The 6% Rule will make you pause while your account is still largely intact.

The Concept of Available Risk

Before you put on a trade, ask yourself: what would happen if all your trades suddenly turned against you? If you used the 2% Rule to set stops and trade

sizes, the 6% Rule will limit the maximum total loss that your account may suffer.

1. Add up all your losses taken this month.
2. Add up your risks on all currently open trades. The dollar risk of any open position is the distance from your entry to the current stop, multiplied by the trade size. Suppose you've bought 200 shares for $50, with a stop at $48.50, risking $1.50 per share. In that case, your open risk is $300. If that trade starts going your way and you move your stop to breakeven, your open risk will become zero.
3. Add the two lines above (losses for the month plus risks on open trades). If their sum comes to 6% of what your account equity was at the beginning of the month, you may not put on another trade until the end of the month or until the open trades move in your favor, allowing you to raise your stops.

The 6% Rule changes the usual question—“do I have enough money for this trade?”—to a much more relevant one—“do I have enough risk available for this trade?” That limit—risking no more than 6% of your account equity in any given month—keeps your total risk under control, ensuring long-term survival. Your total available risk for the month is 6% of your account equity, and the first question to ask yourself when considering a new trade is “Considering all my open and closed trades for this month, do I have enough available risk for this trade?”

You know how much money, if any, you've lost during the current month. It's easy to calculate how much money you have at risk in your open trades. If your previous losses for this month plus your risk on existing trades expose you to a total risk of 6% of your account equity, you may not put on another trade.

If the 6% Rule doesn't allow you to put on a new trade, continue to track the stocks you're interested in. If you see a trade you really want to take, but don't have available risk, consider closing out one of your open trades to free up some risk.

If you are near the 6% limit but see a very attractive trade you wouldn't want to miss, you have two options. You can take profits on one of your open trades to free up available risk. Alternatively, you may tighten some of your

protective stops, reducing your open risk. Just be sure that in your eagerness to trade you do not make your stops too tight (see Chapter 54).

Let's review an example, assuming, for the sake of simplicity, that a trader will risk 2% of his account equity on any given trade.

1. At the end of the month, a trader has $50,000 in his account, with no open positions. He writes down his maximum risk levels for the month ahead—2% or $1,000 per trade and 6% or $3,000 for the account as a whole.
2. Several days later he sees a very attractive stock A, figures out where to put his stop, and buys a position that puts $1,000, or 2% of his equity, at risk.
3. A few days later he sees a stock B, and puts on a similar trade, risking another $1,000.
4. By the end of the week he sees a stock C, and buys it, risking another $1,000.
5. The next week he sees a stock D, more attractive than any of the three above. May he buy it? No, he may not, because his account is already exposed to 6% risk. He has three open trades, risking 2% on each, which means he may lose 6% if the market turns against him. The 6% Rule prohibits him from taking any more risks at this time.
6. A few days later, the stock A rallies and the trader moves his stop above breakeven. Stock D, which he wasn't allowed to trade just a few days ago, still looks very attractive. May he buy it now? Yes, he may, because his current risk is only 4% of his account. He is risking 2% in stock B and another 2% in stock C, but nothing in stock A, because its stop is above breakeven. The trader buys stock D, risking another $1,000 or 2%.
7. Later in the week, the trader sees stock E, which looks very bullish. May he buy it? Not according to the 6% Rule because his account is already exposed to a combined risk of 6% in stocks B, C, and D (there is no longer a risk in stock A). He may not buy stock E.
8. A few days later, stock B hits its stop. Stock E still looks attractive. May he buy it? No, since he already lost 2% on stock B and has a 4%

exposure to risk in stocks C and D. Adding another position at this time would expose him to more than 6% risk per month.

Three open trades isn't a lot of diversification. If you wish to make more trades, set your risk per trade at less than 2%. For example, if you risk only 1% of your account equity on any trade, you may open up to six positions before maxing out at the 6% limit. In trading a large account, I use the 6% Rule but tighten the 2% Rule to well under 1%.

The 6% Rule allows you to increase your trading size when you're on a winning streak but makes you stop trading early in a losing streak. When markets move in your favor, you can move your stops to breakeven and have more available risk for new trades. On the other hand, if your positions start going against you and hitting stops, you'll quickly stop trading and save the bulk of your account for a fresh start next month.

The 2% Rule and the 6% Rule provide guidelines for pyramiding—adding to winning positions. If you buy a stock and it climbs high enough to raise your stop above breakeven, then you may buy more of the same stock, as long as the risk on the new position is no more than 2% of your account equity and your total account risk is less than 6%. Handle each addition as a separate trade.

Many traders go through emotional swings, feeling elated at the highs and gloomy at the lows. Those mood swings will not help you trade, just the opposite. It is better to invest your energy in risk control. The 2% and the 6% Rules will convert your good intentions into the reality of safer trading.

52. A Comeback from a Drawdown

When the level of risk goes up, our ability to perform goes down. Beginners make money on small trades, start feeling confident, and jack up trade size. That's when they start losing. The increased level of risk on bigger positions makes them stiffer and less nimble, and that's all it takes to fall behind.

I saw a great example of that while running a psychological training group for a day-trading firm in New York. That firm taught its traders a proprietary stock trading system and let them trade the firm's capital on a profit-sharing basis. Their two top traders were making up to a million dollars a month; others made much smaller profits but quite a few lost money. The firm's owner asked me to come and help losing traders.

They were shocked to hear that a psychiatrist was coming and loudly protested they “weren't crazy.” The owner provided the motivation by telling his worst performers they had to participate—or else leave the firm. After six weeks, the results were such that we had a waiting list for the second group.

Since the company taught traders its own system, we focused on psychology and risk control. In one of our first meetings, a trader complained that he had lost money each day for the past 13 days. His manager, who sat in on our meetings, confirmed that the fellow was using the firm's system but couldn't make any money. I began by saying that I'd take off my hat for anyone who lost 13 days in a row and had the emotional strength to come in and trade the next morning. I asked the man how many shares he traded, since the firm set a maximum for each trader. He was permitted to buy or sell up to 700 shares at a clip, but voluntarily reduced it to 500.

I told him to drop his size down to 100 shares until he had a week with more winning days than losing and was profitable overall. Once he cleared that hurdle for two weeks in a row, he could go up to trading 200 shares at a clip. Then, after another 2-week profitable period, he could go up to 300 shares, and so on. He was allowed a 100 share increment after two weeks of profitable trading, but if he had a single losing week, he'd have to drop back to the previous level. In other words, he had to start small, increase the size slowly, but drop it fast in case of trouble.

The trader loudly objected that 100 shares weren't enough to make money. I told him to stop kidding himself, since by trading 500 shares he wasn't making any money either, and he reluctantly agreed. When we met a week later he reported that he had four profitable days and was profitable overall. He made very little money because of the 100 share size, but he was ahead of the game. He continued to make money during the next week and then stepped up to 200 shares. After another profitable week he asked, “Doc, do you think this could be psychological?” The group roared.

Why would a man lose while trading 500 shares, but make money trading 100 or 200?

I took a $10 bill out of my pocket and asked whether anyone in our group would like to earn it by climbing on top of our long and narrow conference table and walking from one end to the other. Several hands went up. Wait, I said, I have a better offer. I'll give $1,000 cash to anyone who comes with me up to the roof of our 10-story office building and uses a board as wide as this table to walk to the roof of another 10-story building across the boulevard. No volunteers.

I started egging on the group—the board will be sturdy, we'll do it on a windless day, I'll pay $1,000 cash on the spot. The physical challenge would be the same as walking on the conference table, but the reward so much greater. Still no takers. Why? Because if you lose your balance on the table, you'll jump down a couple of feet and land on the carpet. If you lose your balance between two rooftops, you'd be splattered on the asphalt.

The higher levels of risk impair our ability to perform. You need to train yourself to accept risks slowly and in well-defined steps. Depending on how actively you trade, those steps can be measured in weeks or months, but the principle remains the same—you need to be profitable during two units of time to go up a step in your risk size. If you lose money during one unit of time, drop down a step in your risk size. This is especially useful for people who want to return to trading after a bad drawdown. You need to gradually work your way back into trading, without an upsurge of fear.

Most beginners are in a hurry to make a killing, but guess who gets killed. Unscrupulous brokers promote overtrading (putting on trades that are too big for your account) to generate commissions. Some stockbrokers outside the United States offer a “shoulder” of 10:1, allowing you to buy $10,000 worth

of stock for every $1,000 you deposit with the firm. Some forex houses offer a deadly “shoulder” of 100:1 and even 400:1.

Putting on a trade is like diving for treasure. There is gold on the ocean floor, but as you scoop it up, remember to glance at your air gauge. The ocean floor is littered with the remains of divers who saw great opportunities but ran out of air. A professional diver always thinks about his air supply. If he doesn't get any gold today, he'll go for it tomorrow. He needs to survive and dive again. Beginners kill themselves by running out of air. The lure of free gold is too strong. Free gold! It reminds me of a Russian saying—the only free thing is this world is cheese in a mousetrap.

Successful traders survive and prosper thanks to their discipline. The 2% Rule will keep you safe from the sharks, while the 6% Rule will save you from the piranhas. If you follow these rules and have a reasonable trading system, you'll be miles ahead of your competitors.

A Trading Manager

It used to puzzle me why institutional traders as a group performed so much better than private traders. An average private trader in the United States is a 50-year-old married, college-educated man, often a business owner or a professional. You would think this thoughtful, computer-literate, book-reading individual would run circles around some loud 23-year-old who used to play ball in college and hasn't read a book since his junior year. In reality, institutional traders as a group outperform private traders year after year. Is it because of their fast reflexes? Not really, because young private traders perform no better than older ones. Nor do institutional traders win because of training, which is skimpy in most firms.

A curious fact: when successful institutional traders go out on their own, most of them lose money. They may lease the same gear, trade the same system, and stay in touch with their contacts, but still fail. After a few months, most cowboys are back in head-hunters' offices, looking for a trading job. How come they could make money for the firms but not for themselves?

When an institutional trader quits his firm, he leaves behind his manager, the person in charge of discipline and risk control. That manager sets the maximum risk per trade. It is similar to what a private trader can do with the 2% Rule. Firms operate from huge capital bases and their risk limits are

much higher in dollar terms but tiny in percentage terms. A trader who violates his risk limit is fired. A private trader can break the 2% Rule and nobody will know, but an institutional manager watches his traders like a hawk. A private trader can throw confirmation slips in a shoebox, but a trading manager quickly gets rid of impulsive people. He enforces discipline that saves institutional traders from disastrous losses, which destroy many private accounts.

In addition to setting a risk limit per trade, a manager sets the maximum allowed monthly drawdown for each trader. When an employee sinks to that level, his trading privileges are suspended for the rest of the month. A trading manager breaks his traders' losing streaks by forcing them to stop trading if they reach their monthly loss limit. Imagine being in a room with co-workers who actively trade, while you sharpen pencils and get asked to run out for sandwiches. Traders do all in their power to avoid being in that spot. This social pressure creates a serious incentive not to lose.

People who leave institutions know how to trade, but their discipline is often external, not internal. They quickly lose money without their managers. Private traders have no managers. This is why you need to become your own manager. The 2% Rule will save you from disastrous losses, while the 6% Rule will save you from a series of losses. The 6% Rule will force you to do something most people cannot do until it's too late—break a losing streak.

PART 10

Practical Details

Will you be buying stocks that break out to new highs? Shorting double tops? Buying pullbacks? Looking for trend reversals? Those approaches differ from each other, and you can make or lose money with each of them. You need to select a method that makes sense to you and feels emotionally comfortable. Choose what appeals to you, what matches your abilities and temperament. There is no such thing as generic trading, any more than there is a generic sport.

To find good trades, you need to define the pattern you want to trade. Prior to using any scan, you need to have a crystal-clear picture of what it should look for. Develop your system, and test it with a series of small trades to make sure you have the discipline to follow your signals. You have to feel certain that you'll trade the pattern you've identified when you see it.

Different styles of trading call for different entry techniques, different methods of setting stops and profit targets, and very different scans. Still, there are several key principles that apply to all systems.

53. How to Set Profit Targets: “Enough” Is the Power Word

Setting profit targets for your trades is like asking about pay and benefits when applying for a job. You may end up earning more or less than expected, but you need to have an idea of what to expect.

Write down your entry level, profit target, and stop for every planned trade in order to compare your risk and reward. Your potential reward should be at least twice as big as your risk. It seldom pays to risk a dollar to make a dollar —you might as well bet on color at a roulette table. Having a realistic profit target and a firm stop will help you make a go/no-go decision for any trade.

Early in my trading career I didn't think of profit targets. If anybody asked me about them, I'd answer that I didn't want to limit my profit potential. Today, I would laugh at such an answer. A beginner without a clear target price will feel increasingly happy as his stock goes up and more despondent as it grinds down. His emotions will prime him to act at the worst possible times: continue to hold and add to his longs at the top and sell out in disgust near the bottom.

When calculating a trade's profit potential, we run into a paradox. The longer your expected holding period, the bigger the profit potential. A stock can rally much more in a month than in a week. On the other hand, the longer your holding period, the higher the level of uncertainty. Technical analysis can be quite reliable for shorter-term moves, but many unpleasant surprises will occur in the longer run.

In an earlier chapter on choosing the time horizon for trades, we examined our three main options. The holding period for position trades or investments is measured in months, sometimes years. We may hold a swing trade for a few days, sometimes weeks. The expected duration of a day-trade is measured in minutes, rarely hours.

Moving averages and channels help set profit targets for swing trades. They also work for day-trades; only there you need to pay more attention to oscillators and exit at the first sign of a divergence against your trade. Profit targets in position trading are usually set at previous support and resistance levels.

The three targets mentioned above—moving averages, channels, and support/resistance levels—are fairly modest. They don't have you shooting for the moon, but are realistic. Keep in mind that “enough” is a power word—in life as well as trading. It puts you in control, and by getting “enough” in one trade after another, you'll achieve excellent results over time.

How to define “enough”? I believe that moving averages and envelopes, along with recent support and resistance levels can show us what would be “enough” for any given trade. Let me illustrate this with several examples: one a swing trade, another a day-trade, and the third a long-term investment.

VRSN was a fairly common example of a modest swing trade: entering near one of the channel lines and taking profits in the value zone between the two moving averages (Figure 53.1). This isn't elephant hunting; this is rabbit hunting, a much more reliable activity.

Figure 53.1 VRSN with 13- and 26-day EMAs, the Impulse system, and a 4% envelope. MACD 12-26-9. *(Chart by Stockcharts.com)*

Swing Trade: Taking Profits in the Value Zone

This record of shorting VeriSign Inc. (VRSN) comes from my trade journal. It was one of several stocks that developed a setup for my “false breakout with a divergence” strategy. The last three days on this chart are marked a, b, and c. On day “a” VRSN broke out and closed above resistance, marked by a horizontal dashed line, while MACD-Histogram couldn't even rise above zero. The next day, marked “b,” VRSN opened below the orange line, showing that the previous day was a false upside breakout (some would call it an upthrust). As soon as MACD-Histogram ticked down, creating a bearish divergence, the pattern was completed, and I immediately went short.

VRSN kept sinking all day and closed lower. The next day, marked “c,” it tried to form a base, and since the daily price was already in the value zone, I decided that it was enough and covered my shorts. Taking an 82 cent profit on 3,000 shares brought in $2,460 before commissions. I could have made more by holding longer, but in swing trading, fast quarters are better than slow dollars. Taking profits in the value zone reduces the level of uncertainty and cuts the time your trade remains at risk.

The EGO day-trade in Figure 53.2 illustrates buying a pullback into the value zone during an uptrend, with a profit target at the upper channel line. I used an oscillator to speed up my exit when the market wouldn't let me exit at the initial target.

Figure 53.2 EGO 25- and 5-minute charts with 13- and 26-bar EMAs, the Impulse system, and Autoenvelope. MACD 12-26-9. *(Chart by TradeStation)*

Taking Profits of a Day-Trade near the Upper Channel Line

This record of buying Eldorado Gold Corp. (EGO) comes from my trade journal. It illustrates using Triple Screen for day-trading and profit-taking. The strategic decision to buy EGO was taken on a 25-minute chart in area A, where the moving average turned up and the Impulse system changed to green (notice that on the previous day there was a false downside breakout—it indicated that this stock didn't want to go down and may be setting up to rally).

My trading strategy here was “pullback to value,” which I executed on a 5-minute chart, as prices gapped up at the open but then pulled back into the value zone (area B). I went long at $9.51; my initial target was $9.75, near the upper channel line on the 25-minute chart, with a stop at $9.37, for a nearly 2:1 reward/risk ratio. Since this was a day-trade, I had it on my screen all day long.

At first, with the uptrend being so strong, I considered taking it overnight, but then bearish divergences began to develop in area C, and I placed an order to sell at $9.75. That turned out to be the high of the day, and my order wasn't filled. As prices turned down from their bearish divergence on a 5-minute chart, I scrambled to lower my sell order to $9.70. It was filled, and I

was out with a profit before the close. Taking a 19-cent profit on 2,000 shares brought in $380 within a few hours.

"Fallen angels" is the name of a scan I use to look for possible investment candidates. It marks stocks that have fallen over 90% from their peaks, stopped declining, bottomed out, and slowly began to rise. A stock that had lost 90% of its value has every right to die, but if it chooses to live, it's likely to rally.

The best time to look for "fallen angels" is when a bear market starts showing signs of bottoming. That's when you find many candidates that survived bear attacks and are starting to get up from the floor. This example shows an old bull market darling IGOI that got badly mauled but stopped declining and began to rise. The weekly chart in Figure 53.3 shows two prior attempts to return to the multiyear peak area. Each of those rallies retraced just about half of the previous bear market.

Figure 53.3 IGOI with 13- and 26-day EMAs, the Impulse system, and a 4% envelope. MACD 12-26-9. *(Chart by Stockcharts.com)*

Setting a Profit Target for a Long-Term Trade at the Resistance Level

At the right edge of the weekly chart, iGo, Inc. (IGOI) is trading slightly above $3, with a rising EMA confirming a new uptrend. Its previous major top was above $60 (notice a kangaroo tail), two recent intermediate rallies had fizzled out, the most recent one near $15, and the previous one near $22 (all marked with purple dashed lines). If this is the start of a new bullish trend, it would be reasonable to set the first profit target near $15, the next near $22.

Is this going to be an easy trade? Far from it. First of all, the latest bottom was near $2, and if you place your stop there, your risk per share will be quite high, and you'll have to reduce trade size. Also, the expected rally may take anywhere from a few months to several years to get going. Are you prepared to wait that long, with your capital tied up? Last but not least, the volume of this stock is low. It will rise if prices rally, but if the rally fizzles out, selling will not be easy. Taking all these factors into account, you can see how hard it is to buy for the long haul.

54. How to Set Stops: Say No to Wishful Thinking

A trade without a stop is a gamble. If you're after thrills, better go to a real casino. Take a trip to Macao, Las Vegas, or Atlantic City, where a gambling house will serve you free drinks and may even comp you a room while you're having fun. Gamblers who lose money on Wall Street receive no freebies.

Stops are a must for long-term survival and success, but most of us feel a great emotional reluctance to use them. The market reinforces our bad habits by training us not to use stops. We all have been through this unpleasant experience: you buy a stock and set a stop that gets hit and you exit with a loss—only to see your stock reverse and rally just as you originally expected. Had you held that stock without a stop, you would've profited instead of losing. Getting repeatedly whipsawed like that makes you feel disgusted with stops.

After several such events, you start trading without stops, and it works beautifully for a while. There are no more whipsaws. When a trade doesn't work well, you get out of it without a stop—you have enough discipline. This happy ride ends after a large trade starts going bad. You keep waiting for it to rally a bit and give you a better exit, but it keeps sinking. As the days go by, it inflicts more and more damage on your account—you're being chewed up by a shark. Soon enough your survival is in danger, and your confidence is shattered.

While you trade without stops, the sharks circling the perimeter of every account grow bigger and meaner. If you trade without stops, a shark bite is only a question of time. Yes, stops are a pain—but using them is a lesser evil than trading without them. This reminds me of what Winston Churchill said about democracy: “It is the worst form of government except all the others that have been tried.”

What should we do? I suggest accepting the irritation and the pain of stops but focusing on making them more logical and less unpleasant.

In my previous book *The New Sell and Sell Short*, I dedicated a long chapter to the intricacies of placing various types of stops. Rather than repeat myself here, I'll offer you a quick summary.

Place Stops outside the Zone of “Market Noise”

Put a stop too close and it'll get whacked by some meaningless intraday swing. Put it too far, and you'll have very skimpy protection.

To borrow an engineering concept, all market moves have two components: signal and noise. The signal is the trend of your stock. When the trend is up, we can define noise as that part of each day's range that protrudes below the previous day's low. When the trend is down, we can define noise as that part of each day's range that protrudes above the previous day's high.

SafeZone stops are described in detail in *Come into My Trading Room*. They measure market noise and place stops at a multiple of noise level away from the market. In brief, use the slope of a 22-day EMA to define the trend. If the trend is up, mark all downside penetrations of the EMA during the look-back period (10 to 20 days), add their depths, and divide the sum by the number of penetrations. This gives you the Average Downside Penetration for the selected look-back period. It reflects the average level of noise in the current uptrend. You want to place your stops farther away from the market than the average level of noise. That's why you need to multiply an average downside penetration by a factor of two or greater. Placing your stop any closer would be self-defeating.

When the trend, as defined by the EMA slope, is down, we calculate SafeZone on the basis of upside penetrations of the previous bars' highs. We count each upside penetrations during a selected time window and average that data to find the Average Upside Penetration. We multiply it by a coefficient, starting with 3, and add that to the high of each bar. Shorting near the highs requires wider stops than buying near quiet, sold-out bottoms.

Like all systems and indicators in this book, SafeZone is not a mechanical gadget to replace independent thought. You have to establish the look-back period, the window of time during which SafeZone is calculated. You also need to fine-tune the coefficient by which you multiply the average penetration, so that your stop goes outside the normal noise level.

Even when not using SafeZone, you may wish to follow its principle of calculating an average penetration against the trend that you are aiming to trade—and putting your stop well outside the zone of market noise.

Don't Place Your Stops at Obvious Levels

A recent low that sticks out like a sore thumb from a tight weave of prices draws traders to place stops slightly below that level. The trouble is most people place their stops there, creating a target-rich environment for the running of stops. The market has an uncanny habit of quickly sinking back to those obvious lows and triggering stops before reversing and launching a new rally. Without trying to assign blame for raiding stops, let me suggest several solutions.

It pays to place your stops at non-obvious levels—either closer to the market or deeper below an obvious low. A closer stop will cut your dollar risk but increase the risk of a whipsaw. A deeper stop will help you sidestep some false breakouts, but if it gets hit you'll lose more.

Take your pick. For short-term swing trading, it generally pays to place your stops tighter, while for long-term position trades, you'd be better off with wider stops. Remember “the Iron Triangle of risk control”—a wider stop demands a smaller trade size.

One method I like is **Nic's stop**, named after my Australian friend Nic Grove. He invented this method of placing a stop not near the lowest low, but at the second lowest (more shallow) low. The logic is simple—if the market is sliding to its second lowest low, it is almost certain to continue falling and hit the key low, where the bulk of stops cluster. Using Nic's stop, I get out with a smaller loss and lower slippage than would occur when the markets drop to more visible lows.

The same logic works when shorting—place your Nic's stop not “a tick above the highest high” but at the level of the second highest high. Let's review some recent examples of both longs and shorts in Figure 54.1.

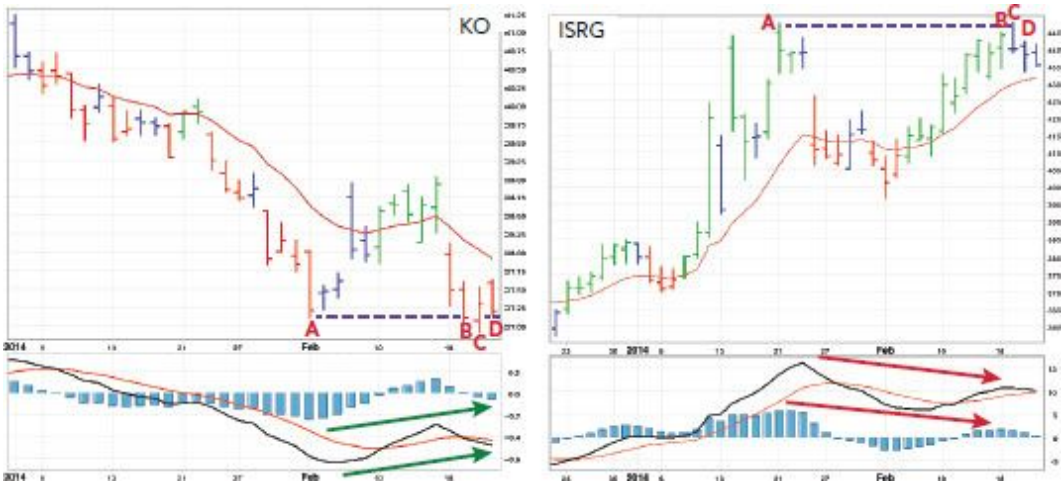


Figure 54.1 Daily charts with 13-day EMA, the Impulse system, and MACD-Histogram 12-26-9. *(Charts by Stockcharts.com)*

Nic's Stops—Long KO and Short ISRG

On the chart of The Coca-Cola Company (KO), we see a false downside breakout with a bullish divergence. The Impulse system has turned from red to blue, permitting buying. If we go long, where should we place our stop?

1. Bar A—the low was $37.10
2. Bar B—the low was $37.05
3. Bar C—the low was $36.89 (a false downside breakout, exceeded the low A by 21 cents).
4. Bar D—the low was $37.14

The crowd will have set its stops below 36.89, but Nic's stop will go to $37.04—a cent below the second lowest recent low, the bottom of bar B.

On the chart of Intuitive Surgical, Inc. (ISRG), we see a false upside breakout with a bearish divergence. The Impulse system has turned from green to blue, permitting shorting. If we go short, where should we place our stop?

1. Bar A—previous peak reached $447.50
2. Bar B—the high was $444.99
3. Bar C—the high was $447.75 (a false upside breakout, exceeded previous peak by 25 cents).
4. Bar D—the high was $442.03

The crowd will have its stops above $447.75, but Nic's stop will go to $445.05—a few cents above the second highest recent high, the top of bar B.

You may want to explore several different systems for placing stops, such as Parabolic, SafeZone, and Volatility stops, described in the books mentioned above. You can get fancy or you can stay plain, but keep in mind the most important principles: first, use stops; and second, don't place them at obvious levels, easily visible to anyone looking at that chart. Make your stops a little

tighter or wider than average—stay away from the crowd because you don't want to be an average trader.

For the same reason, avoid placing stops at round numbers. If you buy at $80, don't place a stop at $78 but at $77.94. If you enter a day-trade at $25.60, don't place a stop at $25.25—move it to $25.22 or even $22.19. Round numbers attract crowds—put your stop a little farther away. Let the crowd take the first hit, and perhaps your own stop will remain untouched.

Another method, popularized by Kerry Lovvorn, is to use **Average True Range (ATR) stops** (see Chapter 24 for the explanation of the ATR). When you enter during a price bar, place your stop at least one ATR away from the extreme of that bar. A two ATR stop is even safer. You can use it as a trailing stop, moving it at every bar. The principle is the same—place your stop outside the zone of market noise. (Figure 54.2)

Figure 54.2 S&P 500 and a 20-day New High–New Low Index. *(Chart by TradeStation, programming by Kerry Lovvorn)*

A 2-ATR Trailing Stop following a Spike Bounce signal

A Spike Bounce signal (described in Chapter 34) occurs when the 20-day New High—New Low Index drops below minus 500, indicating a bearish imbalance, and then rallies above that level, showing that bulls are coming

back. Spike Bounce signals are marked by vertical green arrows. Here S&P bars get colored green while the Spike Bounce signal is, in effect, purple after it disappears. The red line trails two ATRs below the highs of the bars of the S&P 500.

The Spike Bounce gives buy signals for the entire market, and this chart trails each buy signal with a 2-ATR close-only stop (intraday crossovers don't count—the market has to close below the stop to activate it). Notice the very productive signals A, B, and C. The buy signal E is still in effect at the time of this writing. The signal D resulted in a loss—there are no universally profitable signals.

One of the advantages of using trailing stops is that they gradually reduce the amount of money at risk. Earlier we discussed the concept of "available risk" (Chapter 51). As a trade followed by a trailing stop moves in your favor, it gradually frees up available risk, allowing you to make new trades.

Even if you don't use SafeZone or ATR stops, be sure to place stops at some distance from recent prices. You don't want to be like one of those fearful traders who jam their stops so close to current prices that the slightest meaningless fluctuation is certain to hit them.

The concept of signal and noise can help you not only place intelligent stops but also find good entries into trades. If you see a stock in a strong trend but don't like to chase prices, drop down one timeframe. For example, if the weekly trend is up, switch to the daily chart, and you'll probably see that once every few weeks, it has a pullback below the value zone. Measure the depths of several recent penetrations below the slow EMA to calculate an average penetration (see Figure 39.3). Place a buy order for the day ahead at that distance below the EMA and keep adjusting it every day. You will use a splash of noisy behavior to get a good entry into a trend-following trade.

Don't Let a Winning Trade Turn into a Loss

Never let an open trade that shows a decent paper profit turn into a loss! Before you put on a trade, start planning at what level you'll begin protecting your profits. For example, if your profit target for that trade is about $1,000, you may decide that a profit of $300 will need to be protected. Once your open profit rises to $300, you'll move your protective stop to a breakeven level. I call that move "cuffing the trade."

Soon after moving your stop to breakeven, you'll need to focus on protecting a portion of your growing paper profit. Decide in advance what percentage you'll protect.

For example, you may decide that once the breakeven stop is in place, you'll protect a third of your open profit. If the open profit on the trade described above rises to $600, you'll move up your stop, so that the $200 profit is protected.

These levels aren't set in stone. You may choose different percentages, depending on your level of confidence in a trade and risk tolerance.

As a trade moves in your favor, your remaining potential gain begins to shrink, while your risk—the distance to the stop—keeps increasing. To trade is to manage risk. As the reward-to-risk ratio for your winning trades slowly deteriorates, you need to begin reducing your risk. Protecting a portion of your paper profits will keep your reward-to-risk ratio on a more even keel.

Move Your Stop Only in the Direction of Your Trade

You buy a stock and, being a disciplined trader, put a stop underneath. That stock rises, generating nice paper profits, but then it stalls. Next, it sinks a little, then a bit more, and then goes negative, inching towards your stop. As you study the chart, its bottom formation looks good, with a bullish divergence capable of supporting a strong rally. What will you do next?

First of all, learn from your mistake of not having moved up your stop. That stop should have been raised to breakeven a while ago. Failing that, your options have narrowed: take a small loss right away and be ready to reposition later—or continue to hold. Trouble is you feel tempted to go for the third and utterly unplanned choice—to lower your stop, giving your losing trade “more room.”

Don't do it!

Giving a trade “more room” is wishful thinking, pure and simple. It doesn't belong in the toolkit of a serious trader.

Giving “more room” to a losing trade is like telling your kid you'll take away his car keys if he misbehaves, but then not following through. That's how you teach him that rules don't matter and encourage even worse behavior. Standing firm brings better long-term results.

The logical thing to do when a trade starts acting badly is to accept a small loss. Continue to monitor that stock and be ready to buy it again if it bottoms out. Persistence pays, commissions are cheap, and professional traders often take several quick stabs at a trade before it starts running in their favor.

Catastrophic Stops: A Professional's Life Jacket

Soon after moving to a house near a lake I bought a kayak, and immediately went shopping for a life jacket. All I had to do to be legal was to have a jacket in the kayak—any cheap piece of junk would suffice. Still, I spent good money on a quality jacket that felt snug and didn't interfere with rowing when I wore it.

All I planned to do with that kayak was to paddle peacefully on a lake, not anywhere near white water or currents. I never expected to actually need that jacket. Did I waste my money buying it? Well, if ever some motor boat clips me, then wearing a high-quality jacket can make the difference between life and death.

It's the same with stops. They're a nuisance and often cost you money. Still, there will be a day when a stop will save your account from a life-threatening collision. Keep in mind that a bad accident is much more likely in the market than on a lake. That's why it's essential to use stops.

A “hard stop” is an order you give to your broker. A “soft stop” is an order you keep in your head, ready to place it when needed. Beginners and intermediate traders must use hard stops. A professional trader, sitting in front of a live screen all day, may use a soft stop if he has the discipline to exit when his system tells him to do it.

Still, accidents happen. A professional trader friend described how he fought against a market reversal. His soft stop was set at a $2,000 loss level, but by the time he threw in the towel and got out, his loss grew to $40,000—the worst of his trading career. This is why, even if you don't use hard stops on a regular basis, you should at the very least use a “catastrophic stop” for every trade.

For any A-trade, whether long or short, draw a line on your chart where you absolutely do not expect that stock to go. Place your hard stop at that level and make it GTC: “good ‘til cancelled.” That will be your catastrophic stop.

Now you can play with the luxury of soft stops. Paddle your kayak hard, knowing that you’re wearing a reliable life jacket.

Had my friend whose $2,000 drawdown metastasized into a $40,000 loss used a hard “catastrophic” stop, he would have taken only a relatively small loss, sidestepped a disaster, and avoided the financial and psychological hurt of a shark bite.

Stops and Overnight Gaps: Only for the Pros

What will you do if your stock gets hit by a major piece of bad news after the market closes for the day? Looking at pre-opening quotes the next morning, you realize that it'll open sharply lower, deep below your stop, promising massive slippage.

This is a rare occurrence, but it does happen.

If you're a new or intermediate trader, there isn't much you can do—just grit your teeth and take your loss. Only coldly disciplined pros have an additional option: day-trade your way out of that stock. Pull your stop, and after the stock begins trading, handle it as if it was a day-trade you bought at the first tick of that morning.

Opening gaps are often followed by bounces, giving nimble traders an opportunity to get out at a smaller loss. This doesn't always happen—which is why most traders should never use this technique. You may actually deepen your loss instead of reducing it.

Be sure to get out before the close. Your damaged stock may bounce today, but tomorrow more sellers are likely to come in and drive it lower. Don't let a bounce lull you into a false hope of a reversal.

55. Is This an A-Trade?

Your performance in any field will improve if you take tests. Getting graded on them will help you recognize your strengths and weaknesses. Now you can work on reinforcing what's good and correcting what's not.

Whenever you complete a trade, the market gives you three grades. It grades the quality of your entry and exit, and most importantly, it delivers your overall trade grade.

If you're a swing trader and use a combination of weekly and daily charts, look for your grades on the dailies. Your **buy grade** is based on the location of your entry, relative to the high and low of the daily bar during which you bought.

$$\text{Buy grade} = \frac{(\text{high}-\text{buy point})}{(\text{high}-\text{low})}$$

The closer to the bar's low and the farther away from the bar's high you buy, the better your buy grade. Suppose the high of the day was $20, the low $19, and you managed to buy at $19.25. Entering those numbers into the formula gives you a buy grade of 75%. If your buy grade is 100%, it means you bought at the bottom tick of the day. That's brilliant, but don't count on it happening. If your buy grade is 0%, it means you bought the top tick of the day. This is terrible and should serve as a reminder not to chase runaway prices. I calculate my buy grade for every trade and consider anything above 50% a very good result, meaning I bought in the lower half of the daily bar.

The following is the formula for your **sell grade**

$$\text{Sell grade} = \frac{(\text{sell point}-\text{low})}{(\text{high}-\text{low})}$$

The closer to the bar's high and the farther away from the low of the bar you sell, the better your sell grade. Suppose the high of the day was $20, the low $19, and you managed to sell at $19.70. Entering those numbers into the formula gives you a sell grade of 70%. If your sell grade is 100%, it means you sold at the top tick of the day. If your sell grade is 0%, it means you sold at the bottom tick of the day. This terrible grade should serve as a reminder to sell earlier instead of panicking. I calculate my sell grade for every trade

and consider anything above 50% a very good result, meaning I sold in the upper half of the daily bar.

When evaluating any trade, most people assume that the amount of money they make or lose in that trade reflects its quality. Money is important for plotting the equity curve, but it's a poor measure of a single trade. It makes more sense to rate the quality of every trade by comparing what you've got to what was realistically available. I find my **trade grade** by comparing points gained or lost in a trade to the height of the daily chart's channel measured on the day of the entry.

$$\text{Trade grade} = \frac{(\text{sell}-\text{buy})}{(\text{channel high}-\text{channel low})}$$

A well-drawn channel contains between 90% and 95% of prices for the past 100 bars (see Chapter 22). You may use any number of channels—parallel to the EMA, Autoenvelope, Keltner, or ATR channels—as long as you're being consistent. A channel contains normal price moves, with only the extreme highs and lows protruding outside it. The distance between the upper and the lower channel lines on the day you enter a trade represents a realistic maximum of what's available to a swing trader in that market. Shooting for a maximum, though, is a very dangerous game. I consider any trade that gains 30% or more of its channel height an A-trade.[1] (Figure 55.1)

Figure 55.1 ADSK daily with 13- and 26-day EMAs and a 7% envelope. Impulse system with MACDHistogram 12-26-9. *(Chart by Stockcharts.com)*

Buy, Sell, and Trade Grades

This chart comes from my diary of a trade in Autodesk, Inc. (ADSK) while working on this book (you saw my plan for this trade in Figure 38.1). I was piggybacking one of the Spike picks, and my strategy here was “pullback to value.” ADSK had recently staged a deeper than average pullback—notice a false downside breakout marked by a red arrow, followed by a successful retest, marked with a green arrow.

1. Day A—Feb. 10, 2014, Monday: high $52.49, low $51.75, upper channel line $53.87, lower $47.61 (we'll need channel values to calculate the trade grade on exit). Bought at $51.77. Buy grade = (52.49 − 51.77) / (52.49 − 51.75) = 97%.
2. Days B and C—Tuesday and Wednesday): rally continues, start moving up stop. Day
3. D—Thursday: high $54.49, low $53.39. Sold at $53.78. Sell grade = (53.78 − 53.39) / (54.49 − 53.39) = 35%. Trade grade = (sell − buy) divided by channel height = (53.78 − 51.77) / (53.87 − 47.61) = 32%.

My buy grade in this trade was unusually high, the sell grade below average, but the overall trade grade was very good. Busy with the book, I traded only 200 shares, so my profit, after commissions, was less than $400. Had I graded my trades by profits, this one would be easy to overlook, but catching 32% of channel earned me an A.

A comment by Kerry Lovvorn at the 2012 annual reunion of SpikeTrade grabbed my attention: he challenged all participants to define what he called ‘an A-trade’—a setup that signals the likelihood of an excellent trade. “You have to define this pattern for yourself,” he said. “If you don't know what's your ‘A-trade,’ you have no business being in the market.”

I knew full well what my A-trades were—a divergence coupled with a false breakout or a pullback to value. Still, if I saw no A-trades on my screen, I'd go for B-trades, and on a really slow day, reach for a C-trade.

Returning home from that reunion, I attached a plastic strip to one of my trading screens with the question: “Is this an A-trade?” Ever since then, I have it in front of me whenever I place an order. The results came quickly:

as the number of non-A-trades sharply declined, my equity curve began to rise at a steeper angle.

You need to have a clear idea of what would be a perfect setup for you, “an A-trade.” Perfect doesn't guarantee profits—there are no guarantees in the market—but it means a setup with a strong positive expectation. It also means something you've traded before with which you are comfortable. Once you know what it is, you can start looking for stocks that exhibit that pattern.

One of the few advantages of a private trader over an institutional one is that we can trade or not trade when we like. We have the luxury of being free to wait for excellent setups. Unfortunately, most of us, in our eagerness to trade, throw away this amazing advantage.

I've added the question “Is this an A-trade?” to my Tradebill, a trade management form we'll discuss in the next chapter. Whenever I see a potential trade, I ask myself this question. If the answer is “yes,” I start calculating risk management, position sizing, and planning my entry. If the answer is “no,” I turn the page and go looking for another pick. (Figure 55.2)

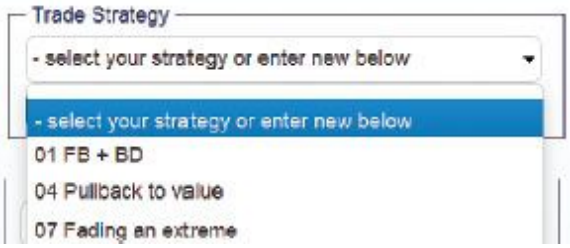

Trade Strategy
- select your strategy or enter new below
- select your strategy or enter new below
01 FB + BD
04 Pullback to value
07 Fading an extreme

Figure 55.2 The Strategy box in the Trade Journal. *(Source: SpikeTrade.com)*

Whenever you plan a trade, be sure to specify what system you'll use. Ask yourself whether this planned trade looks like an “A-trade” according to your system.

I use the words “system” and “strategy” interchangeably—both mean a trade plan. As you can see from this snapshot of my trade journal's Strategy box, taken in September 2013, I currently trade three systems. My main one is a “false breakout with a divergence.” I also occasionally trade pullbacks to value—buying pullbacks during uptrends and shorting rallies in downtrends. On rare occasions, I trade against the extremes, buying severely beaten down stocks or shorting stocks whose wild rallies are stalling.

No matter how grand an idea or a stock tip, I will not trade it unless it fits into one of my three strategies. Ideas come and go, fly or flop—but strategies stay and grow better with age, as you learn how they perform under various market conditions.

Gradually, you may develop new strategies and drop others. You can see that the ones I use are numbered 1, 4, and 7. The rest of the numbers were strategies I stopped using.

Your system can be very mechanical or quite general, with just a few key principles, like my Triple Screen. Either way, you must know what your "A-trade" looks like before you plan your next trade.

I'll walk you through one of my strategies, but remember that you don't have to copy it (Figure 55.3). The way we trade is as personal as handwriting. Define a strategy that feels comfortable to you, test it, and then find a chart that perfectly represents it. Print that chart and post it on a wall near your trading desk. Now you can search for trades that look the way that chart looked on the day you entered that trade.

Figure 55.3 SLB daily with 13- and 26-day EMAs and a 6% envelope. Impulse system with MACDHistogram 12-26-9. *(Chart by Stockcharts.com)*

False Downside Breakout with a Bullish Divergence

This chart, from my Trade Journal, shows a near-perfect example of a swing trade strategy that I abbreviate as “01 FB + BD”—a false breakout with a bullish or bearish divergence. Schlumberger, Ltd. (SLB) was in a well-established downtrend, and when it reached a new low at A, it looked like just another bottom during a long and painful slide. I look at the entire circled area of MACD-Histogram as a single bottom because it never crossed above the zero line. In area B, the picture became more interesting: MACD-Histogram rallied above its centerline, “breaking the back of the bear.” The weekly Impulse system (not shown), which had been red until then, turned blue, removing its prohibition of buying. In area C, SLB cracked to a new low, but MACD declined to a much more shallow low, setting up for a bullish divergence.

Look carefully at the first blue bar after several red bars in area C. That's where MACD-Histogram ticked up, completing a bullish divergence. In addition, that bar rallied and closed above the downside breakout level, marked by a purple dashed line: it marked previous bars as a false downside breakout.

I bought during that bar (marked by a vertical green arrow), without waiting for it to close, going long 2,000 shares at $60.80, with a stop at $59.12. Four days later, as prices began approaching the upper channel line as well as the level of the previous top I started taking profits. I sold 1,000 shares at $66.55 and the rest on the following day at $67 (both marked by red arrows). I booked nearly $6 per share, for a total of $11,950 before commissions in five trading days. The system delivered a beautiful trade.

This is the chart I have in mind when looking for stocks and futures to trade. I want to find those that have completed their bottom A and top B and are declining into what could become bottom C. In the background, the Impulse system on the weekly chart cannot be red because that would prohibit buying.

In the next section, on trade planning, you'll see how to use a form I named Tradebill to make trading decisions more objective. Every trade has several parameters, and it's easy to overlook some of them in the heat of action. Just as a pilot goes through a preflight checklist, a trader needs to check his list before deciding to place an order.

56. Scanning for Possible Trades

There are thousands of stocks out there, and in the days and weeks ahead, some will rise, others fall, and some will fluctuate. Each stock will make money for traders whose systems are in gear with it—and lose money for the rest. Developing a trading system or a strategy must come before scanning. If you don't have a clearly defined strategy, what will you scan for?!

Begin by developing a system that you trust. Once you have it, looking for trading candidates will become quite logical and straightforward. Looking at your list of candidates, the first question about any pick will be “Is this an A-trade?” In other words, is this pick close to your ideal pattern? If the answer is “yes,” you may start working up a trade.

Scanning means reviewing a group of trading vehicles and zooming in on trading candidates. Your scanning can be visual or computerized: you may flip through multiple charts, taking a quick glance at each, or else have your computer run through that list and flag stocks whose patterns appeal to you. To repeat, defining a pattern you trust must be your first step, scanning a more distant second.

Be sure to have realistic expectations for scanning. No scan can find you the needle in a haystack—the one and only gem to trade. What a good scan does is bring up a group of candidates on which to focus your attention. You can make that group bigger or smaller by loosening or tightening scan parameters. A scan is a time saver that delivers potential candidates; it is not a piece a magic to free you from the necessity of working up your picks.

Begin by describing what stocks you want to find. For example, if you're a trend-follower, but don't like chasing stocks, you may design a scan to find stocks whose moving average is rising but the latest price is only a small percentage above that average. You can write a scan yourself or hire someone to do it for you—there are programmers who offer this service.

The raw list of stocks to be scanned can be as small as a few dozen or as large as the S&P 500, or even Russell 2,000. I like looking for trading candidates on weekends, and depending on how much time I have, take one of the two approaches—one lazy and the other hardworking. The lazy way, when my time is limited, is to review Spikers' picks for the week ahead. Spikers are the elite members of SpikeTrade.com, and I figure that among a

dozen picks by super-smart traders who compete for the best pick of the week there ought to be a stock or two for me to piggyback. I examine those picks, while adding my market opinion to the mix. Depending on my outlook for the week ahead, I focus primarily on long or short candidates.

The hard-working way consists of dropping all 500 components of the S&P 500 into my software and running a scan for potential MACD divergences. I've seen many divergence scans, but never a reliable one—they all delivered too many false positives and missed many good divergences. Then I realized that a divergence was “an analog pattern”—clearly visible to a naked eye but hard to pick with digital processing. I turned to John Bruns, who built me a semiautomatic MACD divergence scanner. Instead of looking for divergences, it scans for patterns that precede divergences and delivers the list of candidates to watch in the days ahead. (Figure 56.1)

Figure 56.1 WFM daily with 13- and 26-day EMAs. Impulse system with MACD-Histogram 12-26-9. Red dots—potential or actual bearish divergences. Green dots—potential or actual bullish divergences. *(Chart by TradeStation, scanner by John Bruns/elder.com)*

MACD-Histogram Semiautomatic Divergence Scanner

We've reviewed MACD Histogram and its divergences in Chapter 23 and returned to this pattern repeatedly throughout this book. Instead of looking for completed divergences, this semiautomatic scan finds stocks that have completed parts A and B of a potential divergence. As part C (the second top or bottom) begins to emerge, this scan starts putting red dots above or green dots below the bar to alert one to the possibility of a divergence.

This chart of Whole Foods Market, Inc. (WFM) shows that a scanner isn't an automatic trade finder. It is a watchdog that alerts you to the possibility that this market is ready to trade—long or short. Having received such a signal, a trader needs to work up that stock to establish the level at which the divergence would be completed and write down entry, target, and stop levels.

Running my MACD divergence semiautomatic scan over the weekly and daily charts of all 500 components of the S&P 500 takes only a minute, but the real work begins when I review the lists of bullish and bearish candidates delivered by this scan. First, I compare the sizes of bullish and bearish lists. For example, for several weeks prior to writing this chapter, my scan for bullish divergences among the components of the S&P 500 produced four to five candidates, while the scan for potential bearish divergences returned between 70 and 80 stocks. This great imbalance indicated that the market was perched at the edge of a cliff and I needed to find some shorts for the coming downturn. I prune my weekly list of trading candidates down to five or six picks that show the most attractive patterns and the best reward to risk ratios. These are the stocks that I'll aim to trade during the week. I have friends who can juggle twenty stocks at once—this can be done, but not by me, and every serious trader must know his limitations.

Another “hardworking way” of finding trade candidates involves scanning stock industry groups. For example, if I think that gold is approaching an important bottom, I'll pull up the list of all 52 gold stocks and 14 silver stocks that are listed at this time and look for buying candidates. While doing that, I'll keep in mind my SLB chart shown in Figure 55.3—I want to find stocks whose patterns look close to my ideal.

If you're going to scan a large number of stocks, it pays to add some **negative rules**. For example, you may want to omit stocks whose average daily volume is below half a million or even a million shares. Their charts tend to be more ragged and their slippage worse than in more actively traded

stocks. You may want to exclude expensive stocks from your scans for buying candidates and cheap stocks from your scans for shorting candidates. Choosing at what levels to place your price filters is a matter of personal choice. This is why scanning is best left for experienced traders. Learn to fish with just a few lines in the water before casting a broad net.

Note

1. This term comes from the U.S. school grading system: A is excellent, B good, C mediocre, and D poor.

PART 11

Good Record-Keeping

“There is no free lunch. As with so many other things, either you're going to pay up front or you're going to pay on the back end for being disorganized, and unfortunately, when you pay on the way out it's always more expensive…” writes Andrew J. Mellon in *Unstuff Your Life*.

The market is perversely inconsistent in dishing out rewards and punishments. There is always a chance that a poorly planned trade may bring profits, while a well-planned and carefully executed trade may end in a loss. This random reinforcement subverts our discipline and encourages sloppy trading.

Good record-keeping is the best tool for developing and maintaining discipline. It ties together psychology, market analysis, and risk management. Whenever I teach a class, I say: “Show me a trader with good records, and I'll show you a good trader.”

Writing down your trade plans will ensure that you don't miss any essential market factors. Good record-keeping will save you from stumbling into impulsive trades. Trading discipline is similar to weight control, which is very hard for most people. If you don't know what you weigh today and whether the curve of your weight is rising or falling, how can you control it? Losing weight begins with standing naked on a scale in the morning and writing down your weight for that day.

We all make mistakes, but if you keep reviewing your records and reflecting on past mistakes, you'll be unlikely to repeat them. Good record-keeping will turn you into your own teacher and do wonders for your account equity.

A quick read of a chapter will not make you a disciplined trader. You'll have to invest hours in doing homework and accept the pain of having your stops

hit. The work comes first, the rewards later. As your account grows, you'll experience a wonderful feeling of accomplishment.

Let's review the three key components of record-keeping:

1. Discipline begins with doing your homework (I'll offer you a homework spreadsheet).
2. Discipline is reinforced by writing down your trade plans (I'll offer you PDF files for working up long and short candidates).
3. Discipline culminates in executing those plans and completing trade records (I'll offer you a link to an online Trade Journal).

Please feel free to personalize all of these documents. The markets are huge and diverse, and there is no “one size fits all” system of analysis, trading, and record-keeping. The basic principles are in this book, but the way you implement them can be your own.

57. Your Daily Homework

When you wake up in the morning and know that you need to be at the office in an hour, you don't spend time planning every little step. You follow an established routine: get out of bed, wash, get dressed, have breakfast, get in a car, etc. This routine puts you in the groove for the day ahead, leaving your mind free for strategic thinking. By the time you arrive at the office, you're ready to face the day.

It pays to have a morning routine for the market: a sequence of steps for touching base with the key factors that may dominate today's trading. This routine should put you in gear with the market before the opening bell, making you alert and ready to act.

I use a spreadsheet for my pre-open routine. The person who gave me this idea was Max Larsen, a money manager in Ohio. I've changed Max's spreadsheet: my current version is numbered 3.7, reflecting two major revisions and a handful of lesser ones. It is based on how I view the markets, while its imbedded links help me reach various websites for the information I want.

My homework spreadsheet (Figure 57.1) is a work in progress, as I keep adding and deleting lines. If you start using it, I'm sure that you'll modify it to suit your preferences. My firm, Elder.com, offers my latest spreadsheet, complete with its psychological self-test as a public service—simply write to info@elder.com and ask for it.

	Elder homework	wed
2	v 3.7	2/19/14
3	Check Far East Markets	up .2 - 1.1%
4	Check Europe Markets	down .5%
5	Econ calendar Briefing.com	Starts, permits down
6	Marketwatch	Crash of 2014
7	Euro	1.375 g/g
8	Yen	98.1 g/g
9	Oil	102 g/g
10	Gold	1317 g/b
11	Bonds @us	133,23 g/b
12	Baltic Dry Index	1,146
13	NH-NL	1208 / 365
14	VIX	13.9 r/b
15	S&P500 cash	1841 g/g
16	D value	at upchannel
17	D 13 FI	pos
18	Expectation of S&P candle	down
19	Mode: Active, Conservative, Defensive or day-trade	def

Figure 57.1 Daily homework spreadsheet. *(Source: elder.com)* I begin by looking at the overseas markets, then major news, key currencies and commodities, and the key stock market indicators. With practice, the entire process can be handled in about 15 minutes. Let's explore it, line by line.

1. Check Far East Markets—This link takes me to the relevant page on Finance.Yahoo.com. I write down overnight percentage changes for Australia and China. Each person's memory works differently, and mine serves me best when I write things down.
2. Check Europe markets—Here I write down percentage changes for the German DAX and the UK FTSE. Markets follow the sun, and you get a feel for how a wave generated in the United States travels to Asia and then to Europe, before returning to our shores.
3. Economic Calendar—This link takes me to the page at Briefing.com that lists fundamental reports scheduled to be released each day. It shows the previous number for each release and the consensus forecast. When an important report, such as Unemployment or Capacity Utilization, either beats or misses its estimates, you can expect market fireworks.
4. Marketwatch—This is a website for the masses, and I look at it to see what they are being fed this morning. Occasionally it suggests contrary opinion trades.

5. Euro—I write down the current price of the most active futures contract, followed by the initials for the Impulse system—green, blue, or red—first for the weekly, then for the daily. This is the format I use for all other markets mentioned below. I look at the Euro futures charts for two reasons. First, there are stretches of time when this currency dances either in gear with or against the U.S. stock market. The other reason is that sometimes Euro futures offer nice day-trading opportunities.
6. Yen—The second of the two reasons outlined above applies here more than the first.
7. Oil—This is the lifeblood of the economy, and oil futures rise and fall with its ups and downs. Oil futures can be traded.
8. Gold—A sensitive indicator of fear and inflationary expectations as well as a popular trading vehicle.
9. Bonds—Rising or falling interest rates are among major drivers of stock market trends.
10. Baltic Dry Index—A sensitive leading indicator of world economy. BDI represents the cost of shipping dry goods, for example textiles from Vietnam to Europe or lumber from Alaska to Japan. BDI is very volatile, and the absence of any trading vehicles based on it helps BDI reflect true economic activity. It is extra useful if you trade shipping industry stocks.
11. NH-NL—I consider the New High–New Low Index the best leading indicator of the stock market and like to write down the latest weekly and daily figures every morning as a refresher.
12. VIX—The volatility index, also called “the fear index.” There is a saying: “When VIX is high, it's safe to buy; when VIX is low, go slow.” A footnote: beware VIX ETFs, notorious for trading out of sync with the VIX index.
13. S&P 500—I write down yesterday's closing price for the index and add the Impulse system initials for its weekly and daily charts.
14. Daily value—I switch to the daily chart of the S&P and note whether its latest bar closed above, at, or below value and also its relation to the

channel lines. It helps me see whether the market is overbought or oversold.

15. Force Index—I note whether its 13-day EMA is above or below its centerline (bullish or bearish), as well as any divergences.
16. Expectation of the S&P candle—I test the accuracy of my market expectations by writing down whether I expect the market to close above or below today's opening price. If no opinion, I leave this field blank. The next day I color this box green or red, depending on whether my expectations turned out to be correct.
17. On the last line of my homework spreadsheet, I summarize it by stating how I'll trade today: actively, conservatively, defensively (closing trades only), day-trade, or no trades at all.

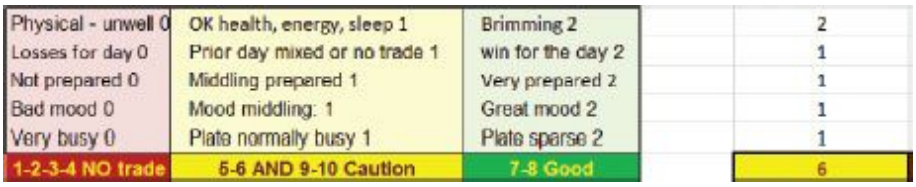
After filling out this spreadsheet, I turn to my open trades. I review their stops and profit targets, making any adjustments for the coming day if necessary. Then, if I'm planning to trade today, I review my short list of candidates, focusing on planned entries, targets, and stops. Now I am in gear with the market, ready to place orders. I do this homework even if I know that I will not be able to trade during the day, for example when traveling. This discipline is just like washing and dressing in the morning, even on the days when you don't plan to go to the office.

Are You Ready to Trade Today?

There are times when you feel in gear with the market, but at other times you're out of touch. Your mood, health, and time pressures influence your ability to trade. For example, imagine trading while suffering from a toothache. You can't fully concentrate on the market and should be calling your dentist, not your broker.

This is why each morning, I take a 30-second psychological self-test for an objective rating of my readiness to trade. The first person I saw use a self-test was Bob Bleczinski, a former Spiker. He may have posted his test online because in 2011, I saw SpikeTrade member Erin Bruce present her self-test at that year's reunion. The questions she asked herself were completely different, but the format looked like Bob's.

I modified Erin's self-test to fit my personality and take it every day before the market opens. Any self-test must be short and specific. Mine has only five questions, and each of them can have only one of three answers: yes, no, or so-so. We'll discuss the logic of designing such tests in the following chapter. If you start using this test, you'll probably modify it to fit your personality and ask the questions that are most important to you (Figure 57.2).



Physical - unwell 0	OK health, energy, sleep 1	Brimming 2	2
Losses for day 0	Prior day mixed or no trade 1	win for the day 2	1
Not prepared 0	Middling prepared 1	Very prepared 2	1
Bad mood 0	Mood middling: 1	Great mood 2	1
Very busy 0	Plate normally busy 1	Plate sparse 2	1
1-2-3-4 NO trade	5-6 AND 9-10 Caution	7-8 Good	6

Figure 57.2 "Am I ready to trade?" self-test. *(Source: elder.com)*

I take this test immediately following completion of my homework. Let's review it line by line:

1. How do I feel physically?
    1. Feeling ill = 0
    2. Feeling average = 1
    3. Feeling excellent = 2
2. How did I trade yesterday?
    1. Lost money = 0
    2. Both made and lost money or didn't trade = 1
    3. Made money = 2
3. Have I done my trade planning this morning?
    1. Not prepared = 0
    2. Middling = 1
    3. Well prepared = 2
4. How is my mood?
    1. Poor = 0
    2. Average = 1
    3. Great = 2

5. How busy is my schedule today?
    1. Very busy = 0
    2. Normally busy = 1
    3. Pretty open = 2 The spreadsheet adds up scores for all five questions and uses Excel's conditional formatting to color the summary cell. If my score is four or lower, this cell turns red. With so many negatives, it signals me not to trade today. The score of five or six flashes a yellow light—trade very cautiously. The score of seven or eight gives me a green light, but if the score rises to nine or ten, the light turns yellow again—with everything so perfect, any change is bound to be for the worse. Don't let recent success go to your head.

A zero rating on some of the questions also warns me not to trade. If I haven't done my trade planning or if my schedule is very booked up, this would be a bad day to trade—better stand aside or place only exit orders.

You, your mind, your mood, and your personality are the essential components of trading. This is why a quick self-test helps you see whether you should be trading today.

58. Creating and Scoring Trade Plans

A plan for any trade must specify what strategy you'll use. It must prompt you to check the dates of earnings and dividends or contract rollovers, in order to save you from being blindsided by predictable news. It must spell out your planned entry, target, and stop as well as your trade size.

Writing down a trade plan makes it real. Once you enter a trade and your equity starts fluctuating, you may feel stressed and forget to perform certain tasks. The plan you write prior to entering a trade becomes your island of sanity and stability in the middle of a storm; it helps ensure that you don't overlook anything essential.

A really good plan will include a scale for measuring its quality. This objective rating, which we'll discuss below, takes less than a minute, but it encourages you to implement only those plans that have a higher likelihood of success. It prompts you to drop marginal plans and not chase borderline trade ideas.

While all my records are in electronic format, I like having my trade plans on paper. I use preprinted forms that I named Tradebills, similar to waybills that come with the packages we order online. When a company sends you a product, it comes with a waybill that shows the name of the product, its quantity, your address, the mode of delivery, rules for returns, and other essential facts. My trades are accompanied by tradebills from the planning stage to the closing day.

I have two separate tradebills for each trading system, one for buying and another for shorting. Here we'll review a tradebill for one of my favorite strategies. You can use it as a starting point for developing your own tradebill.

Whenever a potential trade catches my eye, I decide which system it fits and then pick up the appropriate blank tradebill. Right there, if a seemingly attractive trade fits no trading system, then there is no trade. Having decided on a system, I write down the date and the ticker symbol, and then score that potential trade, as shown below. If the score is high enough, I proceed to complete my trade plan; otherwise, I toss that sheet of paper into a wastebasket and go looking for other trades.

Wherever I go, I carry my tradebills for open trades. If I'm at my desk, they are next to my keyboard. If I go out during the day and bring my laptop, I put those tradebills between the keyboard and the screen, so they'll be the first thing to see when I open up my laptop.

Having written down my trade plans for years, I gradually developed a method for scoring them before making a go/no-go decision. My habit of scoring plans was reinforced when I read *Thinking, Fast and Slow* by Prof. Daniel Kahneman. This book on decision making by a behavioral economist and a Nobel Prize winner underscored the value of simple scoring systems—they make our decisions more rational and less impulsive.

Scoring Your Trade Plans (a Trade Apgar)

Among the examples in Prof. Kahneman's book was his description of the work of Dr. Virginia Apgar (1909–1974), a pediatric anesthesiologist at Columbia University. She is widely credited with saving countless lives. Doctors and nurses worldwide use the Apgar scale for deciding which newborns require immediate medical care.

Most babies are born normal; some have complications, while others are at risk of dying. Prior to Dr. Apgar, doctors and nurses used clinical judgment to tell those groups apart, and their mistakes contributed to infant mortality. Dr. Apgar's scoring system made their decisions objective.

The Apgar score summarizes answers to five simple questions. Each newborn is rated on its pulse, breathing, muscle tone, response to a pinch, and skin color. A good response to any question earns two points, poor zero, or one for an in-between. The test is generally done at one and five minutes after birth. Total scores of seven and above are considered normal, 4 to 6 fairly low, and less than 4 critically low. Babies with a good score are safe to put into general care, while those with low Apgar scores require immediate medical attention. The entire decision-making process, focusing on whom to treat aggressively, is quick and objective. Dr. Apgar's simple scoring system has improved infant survival rates around the world.

After reading Prof. Kahneman's book, I renamed my scoring system the “trade Apgar.” It helps me decide which of my trade ideas are strong and healthy or sickly and weak. Of course, as a trader, my actions are completely opposite to those of a pediatrician. A doctor focuses on the sickest kids, to

help them survive. As a trader, I focus on the healthiest ideas and trash the rest.

Before I show you my Trade Apgar, a word of caution: the scoring method you're about to see is designed for one system—my “false breakout with a divergence” strategy. All other systems will require a different test. Use my Trade Apgar as a starting point for developing a test for your own system.

For example, I recently gave the file of my Trade Apgar to a professional option writer who consulted with me. He loved the idea of a written test, which reduced impulsivity, one of his key problems. Within a few weeks, he showed me his own Trade Apgar, which greatly differed from mine. He replaced one of my indicators with his favorite RSI and Stochastic and added questions directly relevant only to option writing. I was happy to see that he was trading more profitably.

A Trade Apgar demands clear answers to five questions that go the heart of a trading strategy. As you develop a Trade Apgar for your own strategy, I suggest keeping the number of questions down to five and rating your answers on a zero/one/two point scale. Simplicity makes this test more objective, practical, and quick.

While looking at a potential trade, I take a blank tradebill from a stack and circle my answers to its five questions. A circle in the red column earns a zero, in the yellow column one point, and in the green column two points. I write down each number in the score box and add up the five lines. Also, if I circle the red column, I may write in the box next to it at what price the answer will change to a more favorable yellow or green. That will raise the plan's score, allowing me to enter a trade at that level. Figure 58.1 shows a Trade Apgar for going long; Figure 58.2 shows a Trade Apgar for shorting.

	zero	one	two	score	level
Weekly Imp	red	green	blue (after red)		
Daily Imp	red	green	blue (after red)		
Daily price	above value	in value zone	below value		
False bkout	none	in place	near		
Perfection	neither time	one timeframe	both timeframes		

Figure 58.1 Trade Apgar for going long, using a strategy of “false breakout with a divergence.” *(Source: elder.com)*

Rate your answers to five questions on a scale from zero to two:

1. Weekly Impulse (described in this book)—zero for Red, one for Green, two for Blue on the weekly chart.
    1. Red Impulse prohibits buying, Green is OK but could be too late, while Blue (after red) shows that bears are losing power, which is a good time to buy.
2. Daily Impulse—same questions and ratings on the daily chart.
3. Daily price—zero if the latest price is above value, one if it's in the value zone, two if below value on the daily chart.
    1. Prices above value may be too late to buy, in the value zone OK, below value could be a bargain.
4. False breakout—zero if none, one if it already happened, two if on the verge of happening.
5. Perfection—zero if neither timeframe, one if only one, two points if both look perfect.
    1. I always analyze markets in two timeframes; one of them must show a perfect pattern for any strategy in order for me to enter a trade. Very rarely both timeframes are perfect—it is fine for one to be perfect and for the other to be merely good. If neither timeframe looks perfect, it can't be an A trade—drop this stock and move on to another one.

	zero	one	two	score	level
Weekly Imp	green	red	blue (after green)		
Daily Imp	green	red	blue (after green)		
Daily price	below value	in value zone	above value		
False bkout	none	in place	pos. w/bear divg		
Perfection	neither time	one timeframe	both timeframes		

Figure 58.2 Trade Apgar for shorting, using strategy of "divergence with a false breakout."

This is a mirror image of Trade Apgar for buying, using the same strategy.

It takes less than a minute to generate a Trade Apgar for any stock. I want to trade only healthy ideas whose score is 7 or higher, and not a single line

rated zero. If the score is 7 or higher, I go on to complete my trade plan. I establish my entry, target, and stop, decide what size to trade, etc.

Trade Apgars provide objective ratings for potential trades. With thousands of trading vehicles available to us, there is no need to waste energy on poor candidates. Use a Trade Apgar to help you zoom in on the best prospects.

Using a Tradebill

Once you become interested in a stock and a Trade Apgar confirms your idea for a trade, completing a tradebill will help you focus on the key aspects of that trade.

Let's review a tradebill for long positions (Figure 58.3).

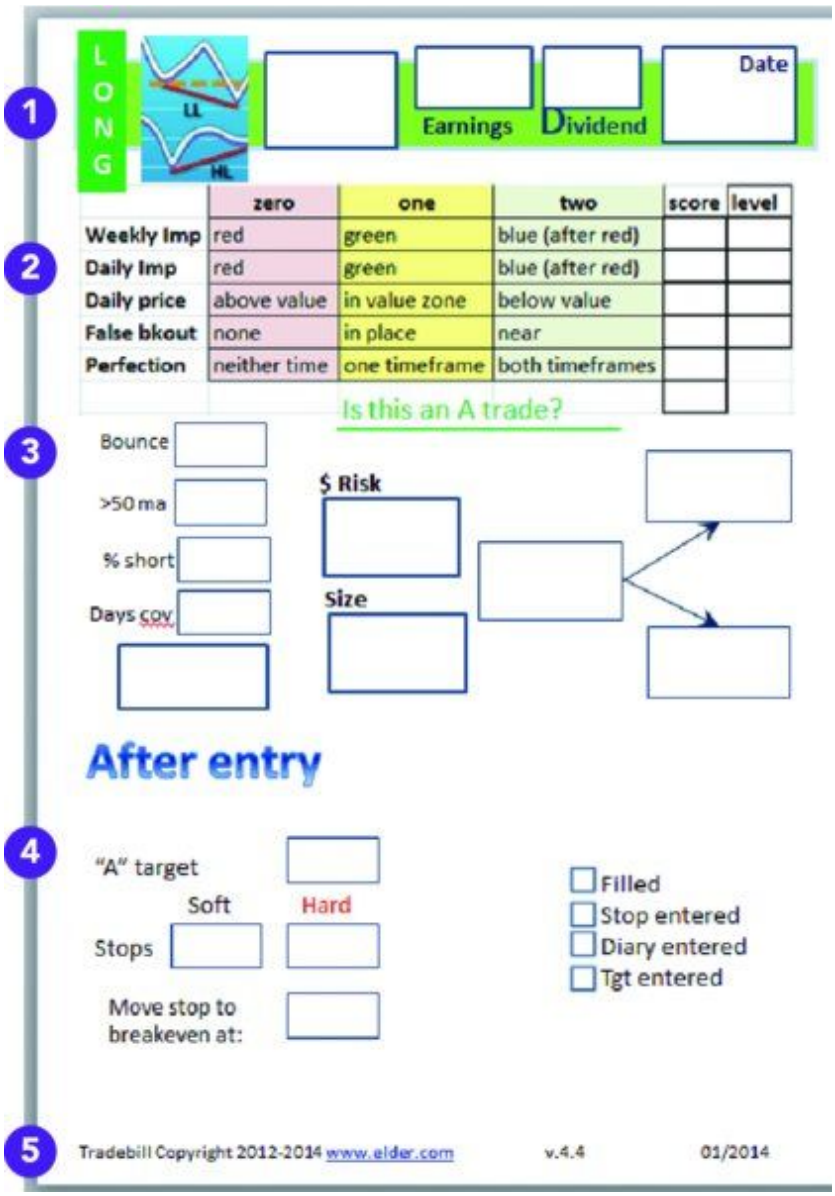


Figure 58.3 Tradebill for going long, using the strategy "divergence with a false breakout." *(Source: elder.com)*

Part 1: Trade identification.

- The green stripe marks it as a long trade.
- A thumbnail picture of a bullish divergence with a false breakout is a reminder of the strategy.
- The first box is for the ticker symbol.
- The next box is for the next earnings date. You can look it up at several free websites, such as www.Briefing.com, www.earnings.com, or

www.Finviz.com. Most traders avoid holding stocks whose earnings are about to be reported. A nasty earnings surprise can do serious damage to your position. Writing down that date forces you to focus on avoiding trouble.

- The next box is the dividend date, if any. I usually look it up at http://finance.yahoo.com. Dividends create tax consequences for longs, while shorts have to pay dividends, so they definitely want to avoid holding on that day.
- The last box is for the date of my plan.

Part 2: Trade Apgar

- My Trade Apgar was described above. Remember that each strategy demands its own Apgar. You're perfectly welcome to replace my questions with those that are relevant to your own system. For example, you may ask whether Stochastic is in the overbought zone (zero), oversold (one), or oversold with a bullish divergence (two).
- After you sum up the numbers for the Trade Apgar, answer this key question in writing: Is this an A-trade? If the total score is below 7, drop this stock and look for another trade.

Part 3: Market, entry, target, stop, and risk control

- The five boxes along the left edge require me to answer questions about the general state of the market. Is the Spike Bounce signal in effect? Is the indicator that traces stocks above their MAs bullish or bearish? What is the short interest in this stock and how many days to cover? All of these studies have been described in this book. The last box is for a few words of a summary.
- Three boxes linked by arrows are at the heart of my decision-making process. They demand three essential numbers for every trade: the entry, the target, and the stop.
- Dollar risk—How many dollars are you willing to risk on this trade? This number can never exceed two percent of your account equity. I usually keep it considerably below that threshold.

- Size—How many shares or futures contracts will you buy, based on the permitted dollar risk and the distance from the entry to the stop. This is explained in detail in "The Iron Triangle of risk control" in Chapter 50.

Part 4: After the entry

- The A target is 30% of the daily channel height added to the entry price.
- The soft stop is what you may keep in mind, while the hard or catastrophic stop is the actual order. It may not be any lower than the stop listed in Section 3.
- Put in the price level at which you'll move your stop to breakeven.
- Check the boxes on the right as you perform these essential steps: place a stop, create a diary entry, and place a profit-taking order.

Part 5: The copyright line

- This line shows when this tradebill was updated. As a reader of this book, you're welcome to write to info@elder.com and request the latest version, which we send to traders as a public service.

I designed my Tradebills in PowerPoint, fitting two to a page. I always keep some blanks handy, but don't preprint too many because I keep tweaking these forms.

My tradebill for short trades is the same, except for a different Trade Apgar, as shown in Figure 58.2. When you start developing your own tradebills, you may want to copy sections 1, 3, and 4, but develop your own section 2—the Trade Apgar for your own system or strategy.

59. Trade Journal

Memory is the cornerstone of civilized life. It allows us to learn from our successes and even more from our failures. Keeping a diary of your trades will help you grow and become a better trader.

Keeping detailed trade records feels burdensome—but that's what serious traders do. Many people asked me after I published a book of interviews with traders (*Entries & Exits*, 2006), what all of them had in common. They lived in different countries, traded different markets, and used different methods—but all kept excellent records.

The best example came from the woman whose interview was in the first chapter of that book. While finishing the manuscript, I realized that our interview had been incomplete and I needed to ask additional questions about her trades. A year later, on another visit to California where she lived, I asked to meet again. I assumed she'd show me some recent trades, but she went to a filing cabinet and pulled out a folder with all her trades for the week of my previous visit. We completed our interview by reviewing her charts from a year ago as if those trades were made yesterday. A bull market was in full swing, she was doing great, but still worked to improve her performance. Her detailed diary was her self- improvement tool.

Let your diary entries serve as your "extra-cranial memory," a tool for building the structure of success.

For years, I struggled with developing a record-keeping system that would be easy to update and analyze. In the beginning, I kept the diary of my trades in a paper journal, gluing in chart printouts and marking them up—I still keep one of those antiques next to my trading desk. Later I kept my diary in Word, and then in Outlook. Finally, in 2012, Kerry Lovvorn and I created a web-based Trade Journal[1].

This Trade Journal is a joy to keep, and both Kerry and I use it for all our trade diaries. Our Trade Journal is available to all, and its use is free (up to a limit). The journals are online, password protected, and absolutely private—although SpikeTrade members have an option of sharing their trade journals for selected trades.

Our Trade Journal is shown in Figure 59.1. Even if you prefer to build your own, look at it to see what must be included in your own record-keeping

system.

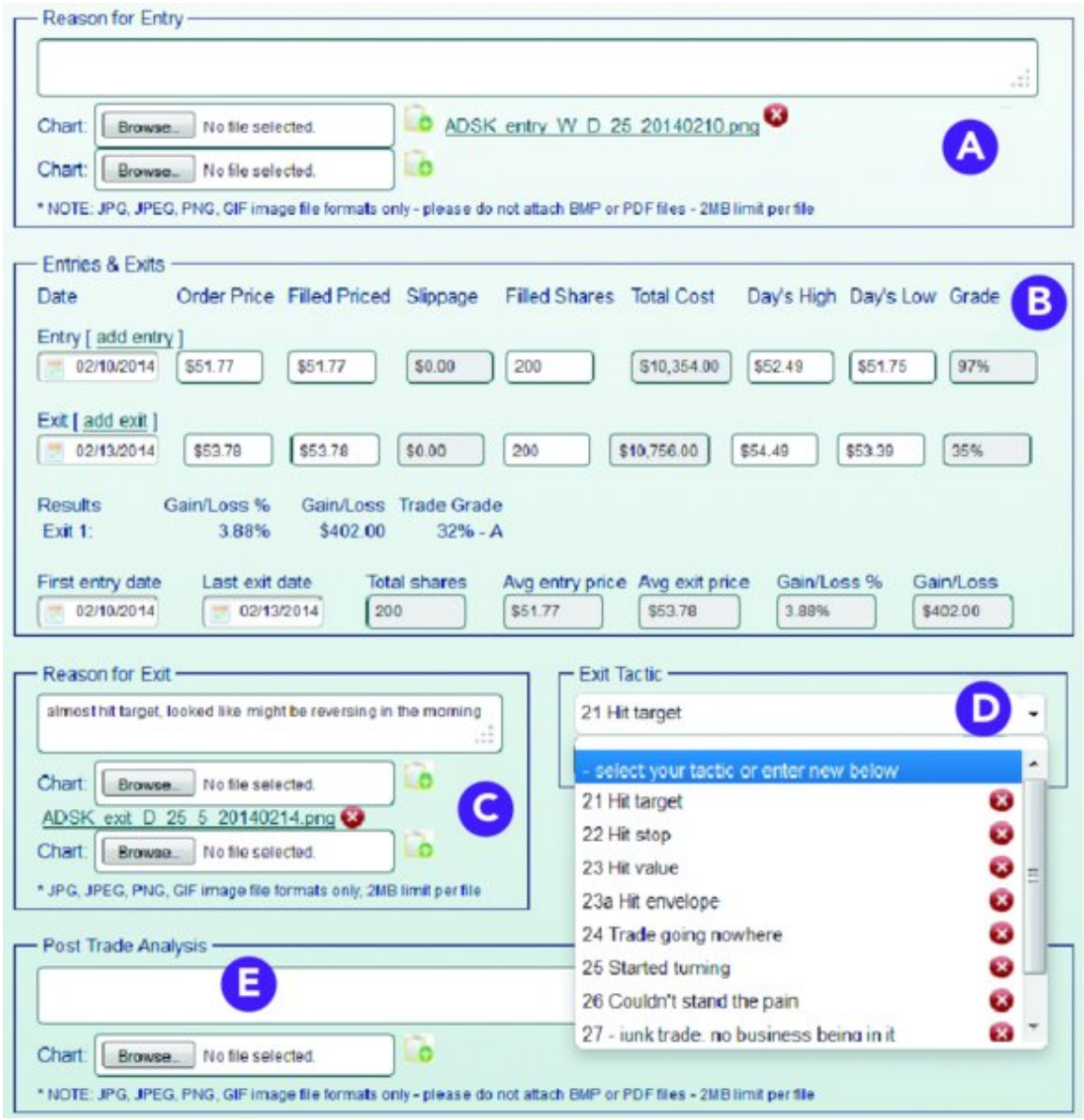

Reason for Entry
Chart: Browse... No file selected.
ADSK_entry_W_D_25_20140210.png
Chart: Browse... No file selected.
A
* NOTE: JPG, JPEG, PNG, GIF image file formats only - please do not attach BMP or PDF files - 2MB limit per file
Entries & Exits
Date Order Price Filled Priced Slippage Filled Shares Total Cost Day's High Day's Low Grade
B
Entry [add entry]
02/10/2014 $51.77 $51.77 $0.00 200 $10,354.00 $52.49 $51.75 97%
Exit [add exit]
02/13/2014 $53.78 $53.78 $0.00 200 $10,756.00 $54.49 $53.39 35%
Results Gain/Loss % Gain/Loss Trade Grade
Exit 1: 3.88% $402.00 32% - A
First entry date Last exit date Total shares Avg entry price Avg exit price Gain/Loss % Gain/Loss
02/10/2014 02/13/2014 200 $51.77 $53.78 3.88% $402.00
Reason for Exit
almost hit target, looked like might be reversing in the morning
Chart: Browse... No file selected.
ADSK_exit_D_25_5_20140214.png
Chart: Browse... No file selected.
C
* JPG, JPEG, PNG, GIF image file formats only, 2MB limit per file
Exit Tactic
21 Hit target
D
- select your tactic or enter new below
21 Hit target
22 Hit stop
23 Hit value
23a Hit envelope
24 Trade going nowhere
25 Started turning
26 Couldn't stand the pain
27 - junk trade. no business being in it
Post Trade Analysis
E
Chart: Browse... No file selected.
* NOTE: JPG, JPEG, PNG, GIF image file formats only - please do not attach BMP or PDF files - 2MB limit per file

Figure 59.1 Trade Journal (a partial view). *(Source: Spiketrade.com)*

Section A—The Trade Journal asks why I decided to trade this stock. I usually leave this box blank because I like to write such comments on the charts, using SnagIt software. In the case of ADSK, I attached a combination chart, featuring weekly, daily, and 25-minute charts.

Section B—Documenting entry and exit dates and prices; accounting for slippage and seeing buy, sell, and trade grades.

Section C—Reasons for exit with an attached combination chart showing both entry and exit.

Section D—The list of exit tactics is longer than that of trade strategies. I may exit because my trade hit its target, or its stop, or is reaching the value zone or the envelope. I may exit if a trade is going nowhere or starting to turn. There are also two negative exits: couldn't stand the pain or recognizing a junk trade after I entered.

Section E—Post-trade analysis. I like to return to every trade two months after the exit and review it with the benefit of hindsight. I create a follow-up chart, mark my entry and exit with arrows, and then write a comment on how my trade looks after the passage of time. This is the best way of learning what I did right or wrong.

The Trade Journal is designed to make your record-keeping simple and logical, helping you plan, document, and learn from your trades. We have already reviewed several sections of the Trade Journal. Figure 38.1 showed its three sections—Setup, Risk, and Parameters. Figure 55.2 showed the strategy box in the Trade Journal.

Most of us quickly forget past trades, but the Trade Journal prompts you to return to them. The trades you entered and exited at the hard right edge of the chart are now in the middle of that chart, where you can re-examine your decisions and learn how to improve them.

Three Benefits

Keeping a trade journal delivers three major benefits. One is immediate—a greater sense of order. The second comes a month or two later, when you start reviewing your closed trades. Finally, after you accumulate dozens of records, you'll have several ways to analyze them and learn from your equity curves.

A Sense of Order and Structure comes from documenting the plan, the entry, and the exit for each trade. Where exactly will you enter, what is your target, where will you place your stop? Defining and writing down those numbers will steer you towards disciplined trading. You'll become less likely to slip into an impulsive buy, overstay a profitable trade, or let a loss snowball without a stop. Filling out risk management numbers will give you

a handle on trade sizing. Documenting exits will make you face your trade grades.

Reviewing Every Trade a month or two after your exit is one of the best learning experiences you can have. Trading signals that may have appeared vague and uncertain at the right edge of a chart become crystal clear when you view them in the middle of your screen. Returning to your past trades and adding an “after the trade” chart makes you reevaluate your decisions. Now you can clearly see what you did right or wrong. Your journal will be teaching you priceless lessons.

I make my strategic decisions on the weekly charts, tactical on the dailies. Since my daily charts are formatted to show five to six months of data, once a month I spend a few hours reviewing trades that I closed two months ago. For example, at the end of March or in the beginning of April, I'll review all trades that I closed out in January. I'll pull up their current charts, mark my entries and exits with arrows, and write a comment on every trade. Let me share two examples with you (Figures 59.2 and 59.3).

Figure 59.2 DISCA daily with 13- and 26-day EMAs and a 6% channel. Impulse system with MACD-Histogram 12-26-9. *(Chart by Stockcharts.com)*

Follow-Up Analysis (Shorting a Top)

My strategy for shorting Discovery Communications, Inc. (DISCA) was "fading an extreme;" my exit tactic "started turning." Entry and exit are marked by arrows. A review two months later confirmed that both decisions were correct. Lesson: the next time I see this pattern, jump aboard.

Figure 59.3 MCP daily with 13- and 26-day EMAs and a 16% channel. Impulse system with MACD-Histogram 12-26-9. *(Chart by Stockcharts.com)*

Follow-Up Analysis (Buying a Pullback)

My strategy for buying Molycorp, Inc. (MCP) was "pullback to value"—I thought that a new uptrend had begun. The following day, I was no longer so sure and sold for a small profit. A review two months later showed that I missed the resumption of the bear trend; my decision to cut and run with a small profit was correct, but I overlooked a major trade. Lesson: continue to

monitor closed-out trades for a week or so and be prepared to re-enter or to reverse.

Such reviews teach you what's right with your trading, and what needs to be changed. Soon after I started doing my “two months later” reviews, I became aware of two problems with my exits. I noticed that my stops were a bit tight and that helped me figure out that by slightly increasing the amount of risk, I could substantially reduce the number of whipsaws and come out ahead. I also noticed that while my short-term swing trades tended to be good, I often missed bigger trends that emerged from those short-term moves. I used that knowledge to adjust my methods going forward.

Reviewing Your Equity Curve is essential because only a rising curve certifies you as a successful trader. If your equity curve is in a downtrend, your system may be at fault, or your risk management poor, or your discipline lacking—whatever it is, you must track it down and solve that problem.

Still, a combined equity curve for all your trades and accounts is a pretty crude tool. The Trade Journal allows you to zoom in and trace your equity curves for specific markets, strategies, and exit tactics. For example, I can run separate equity curves for longs and shorts, for different strategies and exits, and even for sources of my trade ideas. Believe me: once you see an equity curve for exits marked “Couldn't stand the pain,” you'll never trade without stops!

Note

1. We relied on capable programming by Helena Trent and used several ideas suggested by Jeff Parker.

CONCLUSION

A Journey without an End: How to Continue Learning

As we near the end of this book, I compliment you on your persistence and commitment. We have worked through the essential trading topics: psychology, tactics, risk management, and record-keeping. Still, becoming a successful trader will take more than reading a single book.

How long do you think it might take?

You may have seen this huge number—10,000. According to some authors, that's the number of hours it takes to become an expert in major pursuits, such as professions or sports. If that is true and you spend 40 hours per week, 50 weeks a year, it'll take five years to become a pro. If you can invest only 20 hours per week, it'll take ten years. That's a scary thought.

If you, like so many people, came to trading after a successful career in another field, be it engineering, farming, or business, you may well have invested that many hours in it. Do you really want to spend another 10,000 hours on a new project at this stage of your life?

Before you shudder at this prospect, let me share a very different number with you—20 hours. It comes from a book, *The First 20 Hours: How to Learn Anything…Fast!* Its author, Josh Kaufman, makes a sensible point that while becoming a world-class expert will take years, you can achieve a basic level of competence in most fields in a much shorter time.

“The early hours of practicing something new are always the most frustrating. That’s why it’s difficult to learn how to speak a new language, play an instrument, hit a golf ball, or shoot great photos. It’s so much easier to watch TV or surf the web…” he writes. To learn a new skill, you need to

find the experts and get their materials, create an action plan, and make an absolute commitment to studying and practicing without any distractions.

By completing just 20 hours of focused, deliberate practice, you can go from near zero to performing reasonably well in many fields. Kaufman describes how he took 20 hours to learn several new skills, including windsurfing and programming a website. Even if you take up a more complex activity, such as flying, 20 hours will get you through the ground school and the first few lessons with an instructor. This won't make you a pilot, but 50 hours of flight time should earn you a private pilot's license.

The number of hours for mastering basic trading skills is even higher, but much closer to flying than to 10,000 hours.

The intellectual demands of trading aren't high. After all, we deal with only five numbers—open, high, low, and closing prices, plus volume. The main difficulty comes from our emotions. Trading stirs up powerful feelings, the strongest of which are greed and fear.

New traders focus on money, dream about what their profits will buy, and throw caution to the wind. They buy as many shares as they can afford and double up on margin. Filled with joyful anticipation, they write down no trade plans. When a trade turns against them, their emotions swing from greed to fear. That's when they freeze, while the market grinds down their accounts.

Technically, trading isn't very hard. Psychologically, it's the hardest game on the planet.

To reduce the stress of trading, keep in mind several essential points. Your trading life depends on following these rules:

- Trade small sizes while learning.
- Do not count money while in a trade.
- Use risk management rules, primarily the 2% Rule.
- Write down your plans, especially these three numbers: entry, stop, and target.
- Keep a trading diary and review it at least once a month.

Most traders are terribly isolated and never get to see how others practice their craft. This isolation contributes to impulsive trading. A private trader who violates every rule in the book and makes gross errors remains invisible to others. Nobody will warn him to stay out of trouble or praise him for a good trade.

In the old days, our brokers knew what we were doing, but now we place orders online. The only human who may contact you about your trades is the margin clerk at a brokerage firm. Getting a call or an e-mail from him is never good news. I hope that you never meet a margin call, sending good money after bad.

To break out of your isolation, to see what good traders are doing, and to be rewarded for your performance, I suggest you look into SpikeTrade.com—a website I run with my friend Kerry Lovvorn. That's where traders share ideas and advice, engage in a friendly competition, and comment on each other's trades. Time and again we see people come in at a fairly basic level, start submitting picks on a voluntary basis, earn performance bonuses, and rise to become serious traders.

I wish you success. Trading is one of the hardest pursuits on Earth, but it's an endlessly fascinating adventure that can be very rewarding. I've been on this journey for decades, and still look forward to every Monday, when markets reopen. While trading has made me free, I still catch myself making occasional mistakes and have to concentrate on my discipline. I reserve the right to be smarter tomorrow than I am today. It is a great journey, and I look forward to sharing it with you.

Dr.Alexander Elder
NewYork–Vermont, 2014

Sources

1. Angell, George. *Winning in the Futures Market* (1979) (Chicago: Probus Publishing, 1990).
2. Appel, Gerald. *Day-Trading with Gerald Appel* (video) (New York: Financial Trading Seminars, Inc., 1989).
3. Ariely, Dan. *The Honest Truth about Dishonesty* (New York: HarperCollins, 2013).
4. Belveal, L. Dee. *Charting Commodity Market Price Behavior* (1969) (Homewood, IL: Dow Jones Irwin, 1989).
5. Bruce, Erin. SpikeTrade Reunion presentation, 2011.
6. Cameron, Peter. Personal communication, 2012.
7. Davis, L. J. "Buffett Takes Stock," *The New York Times*, April 1, 1990.
8. Douglas, Mark. *The Disciplined Trader* (New York: New York Institute of Finance, 1990).
9. Edwards, Robert D., and John Magee. *Technical Analysis of Stock Trends* (1948) (New York: New York Institute of Finance, 1992).
10. Ehlers, John. *MESA and Trading Market Cycles* (Hoboken, NJ: John Wiley & Sons, 1992).
11. Elder, Alexander, *Come into My Trading Room* (Hoboken, NJ: John Wiley & Sons, 2003).
12. Elder, Alexander, *Directional System* (video) (New York: Financial Trading Seminars, Inc., 1988).

13. Elder, Alexander, *Entries & Exits* (Hoboken, NJ: John Wiley & Sons, 2006).
14. Elder, Alexander, *Force Index* (video) (New York: Elder.com, Inc., 2010).
15. Elder, Alexander. *MACD & MACD-Histogram* (video) (New York: Financial Trading Seminars, Inc., 1988).
16. Elder, Alexander, "Market Gurus," *Futures and Options World*, London, September 1990.
17. Elder, Alexander & Kerry Lovvorn, *The New High–New Low Index* (Alabama: SpikeTrade, 2012).
18. Elder, Alexander, *The New Sell & Sell Short: How to Take Profits, Cut Losses, and Benefit from Price Declines* (Hoboken, NJ: John Wiley & Sons, 2011).
19. Elder, Alexander, *Technical Analysis in Just 52 Minutes* (video) (New York: Financial Trading Seminars, Inc., 1992).
20. Elder, Alexander, "Triple Screen Trading System," *Futures Magazine*, April 1986.
21. Elder, Alexander, *Triple Screen Trading System* (video) (New York: Financial Trading Seminars, Inc., 1989).
22. Elder, Alexander, *Two Roads Diverged: Trading Divergences* (New York: Elder.com, 2012).
23. Elliott, Ralph Nelson, *Nature's Law* (1946) (Gainesville, GA: New Classics Library, 1980).
24. Engel, Louis, *How to Buy Stocks* (1953) (New York: Bantam Books, 1977).
25. Freud, Sigmund, *Group Psychology and the Analysis of the Ego* (1921) (London: Hogarth Press, 1974).
26. Friedman, Milton, *Essays in Positive Economics* (Chicago: The University of Chicago Press, 1953).

27. Frost, A. J., and R. R. Prechter, Jr., *Elliott Wave Principle* (Gainesville, GA: New Classics Library, 1978).

28. Gajowiy, Nils, Personal communication, 2012.

29. Gallacher, William, *Winner Takes All—A Privateer's Guide to Commodity Trading* (Toronto: Midway Publications, 1983).

30. Gann, W. D., *How to Make Profits in Commodities* (Chicago: W. D. Gann Holdings, 1951).

31. Gawande, Atul, *The Checklist Manifesto: How to Get Things Right* (New York: Henry Holt and Company, 2011)

32. Gleick, James, *Chaos: Making a New Science* (New York: Viking/Penguin, 1987).

33. Goepfert, Jason, SentimenTrader.com

34. Granville, Joseph, *New Strategy of Daily Stock Market Timing for Maximum Profit* (Englewood Cliffs, NJ: Prentice Hall, 1976).

35. Greenson, Ralph R., "On Gambling" (1947), in *Explorations in Psychoanalysis* (New York: International Universities Press, 1978).

36. Grove, Nic, Personal communication, 2004.

37. Gunter, Jock, Personal communication, 2013.

38. Havens, Leston, *Making Contact* (Cambridge, MA: Harvard University Press, 1986).

39. Hurst, J. M., *The Profit Magic of Stock Transaction Timing* (Englewood Cliffs, NJ: Prentice-Hall, 1970).

40. Investopedia.com.

41. Kahneman, Daniel, *Thinking, Fast and Slow* (New York: Farrar, Straus and Giroux, 2011).

42. Kaufman, Josh, *The First 20 Hours: How to Learn Anything … Fast!* (New York: Portfolio/Penguin, 2013).

43. Kaufman, Perry, *Trading Systems and Methods* (Hoboken, NJ: John Wiley & Sons, 2013)

44. Larsen, Max, SpikeTrade Reunion presentation, 2007.

45. LeBon, Gustave, *The Crowd* (1897) (Atlanta, GA: Cherokee Publishing, 1982).

46. Lefevre, Edwin, *Reminiscences of a Stock Operator* (1923) (Greenville, SC: Traders Press, 1985).

47. Mackay, Charles, *Extraordinary Popular Delusions and the Madness of Crowds* (1841) (New York: Crown Publishers, 1980).

48. McMillan, Lawrence G., *Options as a Strategic Investment* (Englewood Cliffs, NJ: Prentice Hall, 2012).

49. Mellon, Andrew J., *Unstuff Your Life* (New York: Avery/Penguin, 2010).

50. Murphy, John J., *Technical Analysis of the Financial Markets* (New York: New York Institute of Finance, 1999).

51. Neill, Humphrey B., *The Art of Contrary Thinking* (1954) (Caldwell, ID: Caxton Printers, 1985).

52. Nison, Steve, *Japanese Candlestick Charting Techniques* (New York: New York Institute of Finance, 1991).

53. Notis, Steve, "How to Gain an Edge with a Filtered Approach," *Futures Magazine*, September 1989.

54. Paulos, John Allen, *Innumeracy. Mathematical Illiteracy and Its Consequences* (New York, Vintage Press, 1988).

55. Plummer, Tony, *Forecasting Financial Markets* (London: Kogan Page, 1989).

56. Pring, Martin J., *Technical Analysis Explained*, 5th ed. (New York: McGraw-Hill, 2013).

57. Rhea, Robert, *The Dow Theory* (New York: Barron's, 1932).

58. Shapiro, Roy, *Why Johnny Can't Sell Losers: Psychological Roots*, unpublished article, 1991.

59. Steidlmayer, J., Peter, and Kevin Koy, *Markets & Market Logic* (Chicago: Porcupine Press, 1986).

60. Surowiecki, James, *The Wisdom of Crowds* (Anchor, 2005).

61. Stoller, Manning, Personal communication, 1988.

62. Teweles, Richard J., and Frank J. Jones, *The Futures Game*, 2nd ed. (New York: McGraw-Hill, 1987).

63. *Twelve Steps and Twelve Traditions* (New York: Alcoholics Anonymous World Services, 1952).

64. Vince, Ralph, *Portfolio Management Formulas* (Hoboken, NJ: John Wiley & Sons, 1990).

65. Weissman, Richard L., *Mechanical Trading Systems: Pairing Trader Psychology with Technical Analysis* (Hoboken, NJ: John Wiley & Sons, 2004).

66. Wikipedia.com.

67. Wilder, J. Welles, Jr., *New Concepts in Technical Trading Systems* (Greensboro, SC: Trend Research, 1976).

68. Williams, Larry, *How I Made One Million Dollars* (Carmel Valley, CA: Conceptual Management, 1973).

69. Williams, Larry, *The Secret of Selecting Stocks* (Carmel Valley, CA: Conceptual Management, 1972).

70. Yannidis, Nikos, Personal communication, 2011.

Acknowledgments

Nobody's born smart. We accomplish what we do we after learning from others and being helped by them. Then, if we do a good job, we may be able to build upon what we learned, advance a few steps, and share our knowledge with those who may follow us.

This book is dedicated to Lou Taylor, probably the most remarkable person I met in my life. He was a brilliant, fearless, and a completely “out of the envelope” man, the amazing story of whose life (he died in 2000) deserves its own book.

The New Trading for a Living reflects how I think, feel, and act in the markets. I am tempted to thank by name all those who helped me become who I am today, and perhaps kick at a few who would have loved to see me fail. If I give in to this temptation it'll become an autobiography instead of a brief acknowledgment. So let me mention only those who directly and substantially helped me during the past 18 months while I was working on this book.

Kerry Lovvorn began as my student but became a partner and a friend. While my background is in psychiatry, his is in steel. As he became more attuned to psychological issues, I became more structured and data oriented. It's a great partnership, and running SpikeTrade together is today at the center of my intellectual life.

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Thank you and see you!

Dr. Alexander Elder
New York–Vermont 2014

About the Author

Alexander Elder, MD, is a professional trader and a teacher of traders. He is the author of several best-sellers, considered modern classics among traders. He also wrote books about Russia and New Zealand.

Dr. Elder was born in Leningrad and grew up in Estonia, where he entered medical school at the age of 16. At 23, while working as a ship's doctor, he jumped a Soviet ship in Africa and received political asylum in the United States. He worked as a psychiatrist in New York City and taught at Columbia University. His experience as a psychiatrist provided him with unique insight into the psychology of trading.

Dr. Elder is an active trader, but he continues to teach and is a sought-after speaker at conferences in the United States and abroad. Dr. Elder is the originator of Traders' Camps—week-long classes for traders. He is the founder of SpikeTrade group, a community of traders whose members share their best stock picks each week in competition for prizes.

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  - trading rules
  - in Triple Screen system
  - and value zone
  - of volume
- Exponential moving average charts
- *Extraordinary Popular Delusions and the Madness of Crowds* (Charles Mackay)

F

- Factor of five
- “Fallen angels” scan
- False breakouts
  - downside
  - reinforcing Stochastic signals
  - from support and resistance
  - upside
- “False breakout with a divergence” strategy
- Fantasies:
  - autopilot myth
  - brain myth
  - cult of personality
  - reality vs.
  - undercapitalization myth
  - wishful thinking
- Far-out-of-the-money options
- Fast Stochastic
- Fear
- Filters
- Financial instrument futures
- Financial journalists
- Financing charges (CFDs)
- Fingers (kangaroo tails)
- *First 20 Hours, The* (Josh Kaufman)
- First step (AA principle)

- Floors, for commodities
- Floor traders
- Followers of gurus
- Follow-up analysis:
  - buying a pullback
  - shorting a top
- Force Index
  - constructing
  - intermediate-term
  - short-term
  - and trading psychology
  - trading rules
  - in Triple Screen system
- Forecasting:
  - dramatic
  - and Force Index
  - managing trades vs.
  - by market cycle gurus
- *Forecasting Financial Markets* (Tony Plummer)
- Forex
- Forward-testing systems
- Fractal patterns
- Fraud, in forex trading
- Freud, Sigmund
- Friedman, Milton
- Fundamental analysis
  - for finding stocks

    - technical analysis with
- Fundamental analysts, concept of value for
- Futures
    - closing prices on daily charts
    - commitments of traders
    - compared to cash trades
    - contango
    - currency
    - floors and ceilings
    - hedging
    - insider trading in
    - inversions
    - margins and risk control with
    - options vs.
    - seasonality with
    - spreads
    - supply and demand factors with
    - time period for
    - 2% Rule for
    - volume trends for
- Futures traders:
    - commitments of, as indicator
    - survival rate for

G

- Gallacher, William R.
- Galleon fund
- Gamblers Anonymous
- “Gambler's ruin”
- Gambling
- Gann, W. D.
- Gawande, Atul
- Gender:
  - and reasons for gambling
  - of traders
- General market indicators
  - Advance/Decline line
  - of consensus and commitment
    - futures traders' commitments
    - legal insider trading
    - short interest
    - signals from advertisers
    - signals from press
    - tracking advisory opinion
  - Most Active Stocks indicator
  - New High–New Low Index
    - constructing
    - and crowd psychology
    - in multiple timeframes and look-back periods
    - 65-day and 20-day

        - trading rules
        - weekly
    - stocks above 50-day MA
- Goepfert, Jason
- Gold:
    - resistance zone for
    - trading in futures vs. cash
- “Good ‘til cancelled” (GTC) orders
- Granville, Joseph
- Gray box software
- Greed
- Greeks (indicators in options analysis)
- Greenson, Ralph
- Group behavior. *See also* Crowd behavior
- Group loyalty
- Grove, Nic
- GTC (good ‘til cancelled) orders
- Gurus
    - dead
    - followers of
    - magic method
    - market cycle

H

- Hamilton, William
- Hard stops
- Havens, Leston
- Hedgers
    - COT reports
    - reports on positions of
- Hedging:
    - futures
    - line between speculating and
- “High” volume
- History of charting
- Homework, daily
- Hound of the Baskervilles signal
- Hourly charts
- House advantage
- *How I Made One Million Dollars* (Larry Williams)
- *How to Buy Stocks* (Louis Engel)
- Hurst, J. M.

I

- Impulse trading system
  - entries in
  - exits in
- Independent thinking, crowd mentality vs.
- Index CFDs
- Indicators. *See also individual indicators and types of indicators*
  - applying moving averages to
  - basic data used for
  - changing parameters of
  - clarity of signals from
  - contradictory
  - identifying trends with
  - at right edge of charts
  - seasons of
  - “shopping for”
  - in Triple Screen trading system
  - at true and false breakouts
- Indicator seasons
- Individual psychology
  - and Alcoholics Anonymous principles
    - applied to trading
    - denial
    - first step
    - lessons from
    - meetings

        - one day at a time
        - rock bottom
    - autopilot myth
    - and bending rules
    - brain myth
    - emotions in trading
    - following gurus
    - reality vs. fantasy
        - autopilot myth
        - brain myth
        - cult of personality
        - undercapitalization myth
        - wishful thinking
    - reasons for trading
        - rational and irrational
        - self-fulfillment
    - rule-bending
    - self-destructiveness
        - controlling
        - gambling
        - and lack of normal human helpfulness in markets
        - self-sabotage
    - undercapitalization myth
    - winners and losers
        - emotional trading
        - and self-control vs. controlling markets
        - taking charge of your life

    - wishful thinking
- Individual traders
    - competing against institutional traders
    - former institutional traders as
    - isolation of
    - one advantage over institutional traders
- Inertia, of trading vehicles
- Innumeracy
- *Innumeracy* (John Allen Paulos)
- Inside information
- Insider trading:
    - in futures markets
    - illegitimate
    - legal, as indicator
- Institutional commissions
- Institutional traders
    - advantages for
    - CFDs used by
    - trade managers of
- Insurance account, for options writing
- Intelligence networks, of institutional traders
- Interbank market
- Interest rate futures
- Intermediate-term Force Index
- Intermediate timeframe
- International exchanges, volume reported by
- In-the-money options
- Intraday charts. *See also* Timeframes; *individual indicators*

- Intrinsic value (options)
- Inverse ETFs
- Inversions (futures)
- Investing (long-term trading)
- *Investors Intelligence*
- Iron Triangle of risk control, the
- Isolation in trading

J

- Japanese candlesticks
- *Japanese Candlestick Charting Techniques* (Steve Nison)

K

- Kahneman, Daniel
- Kangaroo tails (fingers)
- Kaufman, Josh
- Keelan, Brian
- Key demands for trades
- Keynes, John Maynard

L

- Lag, of moving averages
- Lane, George
- Large speculators
- Larsen, Max
- Leaders:
  - of crowds
  - and fear of uncertainty
  - gurus
    - dead
    - followers of
    - magic method
    - market cycle
  - loyalty to
- Learning trading skills
- LeBon, Gustave
- Letter writers (financial)
- Leverage, in forex
- Leveraged ETFs
- Leveraged inverse ETFs
- Life, taking charge of
- Limits, on futures
- Limit orders
- Liquidity
- Long-term price cycles
- Long-term timeframe

- Long-term trading (investing)
- Look-back windows (New High–New Low Index)
- Losers:
  - AA principles for
  - denial by
  - emotional responses of
  - and emotional trading
  - fantasies of
    - autopilot myth
    - brain myth
    - cult of personality
    - undercapitalization myth
  - pain and regret felt by
  - and self-control vs. controlling markets
  - self-destructive
  - and volume of trading
  - wishful thinking by
- Losers Anonymous
- Losses:
  - in account as a whole
  - businessman's risks vs.
  - on CFDs
  - cutting
  - of former institutional traders
  - inability to manage
  - on options
  - per share, limiting
  - psychological effect of

    - 6% Rule to limit
    - 2% Rule to limit
- Loss aversion
- Lovvorn, Kerry
- Low-priced stocks, indictors based on volume of
- “Low” volume

M

- MAs, *see* Moving averages
- MACD, *see* Moving Average Convergence-Divergence
- MACD-Histogram
    - combined with channels
    - divergences
    - in Impulse system
    - and market psychology
    - peaks and valleys
    - seasons of
    - semiautomatic divergence scanner
    - slope of
    - time windows of
    - trading rules
    - in Triple Screen system
- MACD Lines
    - crossover of Signal lines and MACD line
    - in divergences
    - and market psychology
    - trading rules
- Mackay, Charles
- MacMillan, Lawrence
- Magic method gurus
- Managing trades
    - forecasting vs.
    - and poll-taking

    - by reading markets and managing yourself
- Mandelbrot, Benoit
- Margins
- Margin calls
- Market(s):
    - attempts to manipulate
    - and automatic trading systems
    - comparing volumes of
    - contango
    - as crowds. *See also* Mass psychology
        - crowd mentality
        - experts on
        - independent thinking vs.
        - of individuals
        - leaders of crowds
        - reasons for joining crowds
        - wisdom of crowds
    - ETFs
    - groups vs. individuals in
    - harshness of
    - inability to control
    - inside information in
    - overbought and oversold
    - randomness in
    - reading
    - seasons of
    - size of
    - source of money in

    - spikes in
    - as sport
    - theories of
    - timeframes of
        - analysis using multiple timeframes
        - conflicting
    - trading ranges vs. trends in
    - worldwide crowds
- Market cycle gurus
- Market data:
    - in computerized technical analysis
    - in moving averages
- Market indexes, in technical analysis
- Market makers
- Market noise:
    - perceived cycles as
    - and placement of stops
    - setting stops outside zone of
- Market orders
    - bid-ask spreads for
    - slippage on
- Market panics
- Market participants, groups of
- Market tide screen (Triple Screen system)
- Market time
- *Market Vane*
- Market wave screen (Triple Screen trading system)

- MAS (Most Active Stocks) indicator
- Mass manias
- Mass psychology
    - and emergence of gurus
    - managing trades
        - forecasting vs.
        - and poll-taking
        - by reading markets and managing yourself
    - the market
        - groups vs. individuals in
        - inside information in
        - source of money in
        - worldwide crowds
    - and markets as crowds
        - crowd mentality
        - experts on
        - independent thinking vs.
        - leaders of crowds
        - reasons for joining crowds
        - wisdom of crowds
    - price
        - as consensus of value
        - crowd behavior reflected in
    - trading scene participants
        - advisors
        - individual traders
        - institutional traders

        - sword makers
    - trend psychology
        - emotions in
        - price shocks
        - rallies and declines
        - social psychology
- Mathematical expectation
- Maximum Entropy Spectral Analysis (MESA)
- Mean between high and low, moving averages based on
- Measuring volume
- Mechanical traders
- *Mechanical Trading Systems* (Richard Weissman)
- Meetings, AA
- Mellon, Andrew J.
- Member Short Sale Ratio
- Memory(-ies):
    - and support or resistance levels
    - in trade diary
- Mental stops
- MESA (Maximum Entropy Spectral Analysis)
- Mind, as component of trading.
    - *See also* Thinking
- Mini-contracts (futures)
- Minus-sum game, trading as
- Miscellaneous indicators. *See also* New High–New Low Index (NH-NL)
- “Missing right shoulder” divergences
- Moltke, Helmuth von

- Money:
  - making
  - motives for seeking
  - in open trades
  - source of
- Money management. *See also* Risk management
  - businessman's risk
  - commissions
  - conservative
  - and emotions
    - businessman's risk
    - and counting money in open trades
    - not being able to sell
  - expenses of trading
  - following rules of
  - with futures
  - and negative mathematical expectation
  - rules as safety net in
  - slippage
- Mood, as component of trading
- Most Active Stocks indicator (MAS)
- Moving averages (MAs)
  - choosing length of
  - dual EMAs
  - exponential. *See also* Exponential moving averages (EMAs)
  - with Force Index
  - and market psychology

    - in setting profit targets
    - simple
    - as support and resistance
    - time windows of
    - weighted
- Moving Average Convergence-Divergence (MACD)
    - creating
    - MACD-Histogram
        - divergences
        - and market psychology
        - peaks and valleys
        - semiautomatic divergence scanner
        - trading rules
    - MACD Lines
        - and market psychology
        - trading rules
    - and market psychology
    - “quick-and-dirty” plotting of
    - scanner for
- Mr. Market
- Mysticism

N

- Naked writers (options)
- NASDAQ
- Nature's law
- *“Nature's Law”* (R. N. Elliott)
- Negative Directional line
- Negative mathematical expectation
- Negative rules, in scanning for stocks
- Neill, Humphrey B.
- Net Field Trend indicator
- Neurotic gamblers
- New High–New Low Index (NH-NL)
    - constructing
    - and crowd psychology
    - in multiple timeframes and look-back periods
    - 65-day and 20-day
    - trading rules
    - weekly
- *New Sell and Sell Short, The* (Alexander Elder)
- Newsletters
- *New Strategy of Daily Stock Market Timing* (Joseph Granville)
- New York Stock Exchange
    - daily volume in 1940s
    - stocks above 50-day MA for
    - volume reported by
    - Western European hours for

- *New York Times, The*
- NH-NL, *see* New High–New Low Index
- Nic's stop
- Nison, Steve
- Noise, market, *see* Market noise
- Notis, Steve

O

- OBV, *see* On-Balance Volume
- Odds against traders
  - bid-ask spread
  - commissions
  - with ETFs
  - expenses
  - slippage
  - and trading as minus-sum game
- Odd-lot Short Sale Ratio
- Odd-lot statistics
- Odysseus
- On-Balance Volume (OBV)
  - and crowd psychology
  - trading signals
- One-bar-at-a-time testing
- One day at a time (AA principle)
- Opening gaps
- Opening prices:
  - on candlestick charts
  - and crowd behavior
  - of daily bars
  - relationship of closing prices and
- Open interest
  - and crowd psychology
  - defined

    - trading rules
- Open trades:
    - changing trade plan during
    - counting money in
    - money at risk in
- Options
    - buying
    - futures vs.
    - limiting risk with
    - price of
    - time decay with
    - writing
- *Options as a Strategic Investment* (Lawrence MacMillan)
- Oscillators
    - in bearish divergences
    - in bullish divergences
    - Force Index
        - constructing
        - intermediate-term
        - short-term
        - and trading psychology
        - trading rules
    - identifying trends with
    - MACD-Histogram
        - divergences
        - and market psychology
        - peaks and valleys

        - slope of
        - time windows of
        - trading rules
    - and mass psychology
    - Relative Strength Index
        - and mass psychology
        - trading rules
    - Stochastic
        - and crowd psychology
        - trading rules
    - in Triple Screen trading system
- Out-of-the-money options
- Overbought:
    - oscillator levels
    - RSI levels
    - as Stochastic signal
- Overnight gaps
- Oversold:
    - oscillator levels
    - RSI levels
    - as Stochastic signal

P

- Pain:
  - and support or resistance
  - volume as measure of
- Paper trading
- Parabolic stops
- “Passing the book”
- Patterns. *See also* Chart patterns
  - for A-trades
  - defining
  - emerging from chaos
  - fractal
  - and Hound of the Baskervilles signal
  - for scanning
  - and trading young stocks
- Paulos, John Allen
- Penny stocks
- %D line
- %K line
- “Perfect order” in markets
- Personality:
  - as component of trading
  - matching trading styles to
- Piranha bite losses
- Player's edge
- Plummer, Tony

- Point-and-figure chartists
- Poll-taking
- *Portfolio Management Formulas* (Ralph Vince)
- Position limits
- Position trading:
    - day-trading vs.
    - market data for
    - profit targets in
    - stops in
- Positive Directional line
- Positive mathematical expectation
- Power:
    - of bears vs. bulls:
        - A/D
        - closing prices
        - divergences
        - Force Index
        - MACD-Histogram
        - MACD Line
        - miscellaneous indicators
        - and NH-NL zero line
        - On-Balance Volume
        - open interest
        - volume
    - profits and feeling of
    - of trends
- Premiums:

    - futures
    - options
- Press, signals from
- Prechter, Robert
- Price(s). *See also* Closing prices; Opening prices
    - on bar charts
    - as consensus of value
    - crowd behavior reflected in
    - divergences from
    - in Force Index
    - indicators derived from
    - as leader of market crowd
    - long-term cycles in
    - memories of
    - of options
    - in Random Walk theory
    - short-term cycles in
    - slippage
    - support and resistance levels
    - and understanding of volume
    - value vs.
- Price risk, hedging and
- Price shocks
- Pring, Martin
- Private traders, *see* Individual traders
- Probabilities
    - businessman's risk
    - choices based on emotions vs.

    - innumeracy
    - positive expectation
- Profit(s):
    - calculating potential for
    - on CFDs
    - “enough”
    - feeling of power from
    - in open trades
    - protection levels for. *See also* Stops
    - source of
- *Profit Magic of Stock Transaction Timing, The* (J. M. Hurst)
- Profit taking:
    - in day-trading
    - in swing trading
    - and tall bars
- Profit-taking zone, for options
- Profit targets:
    - and Average True Range
    - in day-trading
    - setting
    - in Triple Screen system
- Protective stops. *See also* Stops
    - defined
    - with EMAs
    - with kangaroo tails
    - to reduce open risk
    - with RSI

    - and Stochastic signals
- Psychological readiness for trading
- Psychology:
    - of trading. *See also* Mass psychology; Individual psychology
        - and focus on reality
        - and paper trading
    - of trends
        - emotions in
        - price shocks
        - rallies and declines
        - and social psychology
- Put-Call Ratio
- Put options
- Pyramiding:
    - Force Index indication for
    - guidelines for

Q

- Quality of trades

R

- Rallies. *See also individual indicators*
  - from 1966 to 1982
  - and channel lines
  - contracts for difference on
  - in downtrends
  - open interest in
  - psychology of
  - short-covering
  - in trading ranges
  - in uptrends
  - volume during
- Random Walk theory
- Readiness for trading
- Reading markets
- Reality:
  - fantasy vs.
  - wishful thinking vs.
- Reasons for trading
- Record-keeping
  - daily homework
  - and psychological readiness for trading
  - Trade Journal
  - trade plans
    - creating
    - scoring

        - using Tradebills
- Regret, support or resistance and
- Relative Strength Index (RSI)
    - and mass psychology
    - trading rules
- Reporting levels
- Resettlement fees
- Resistance. *See also* Support and resistance
    - defined
    - pain and regret
- Reversals
    - betting on
    - consensus preceding
    - Force Index indication of
    - journalists’ writings signaling
    - kangaroo tails
    - losers' responses to
    - NH-NL indicating
    - and open interest
    - and price shocks
    - protection from. *See also* Protective stops
    - pullbacks signaling
    - and stocks above 50-day MA
    - timing of trades and
    - and value zone
    - and volume of trading
- Reverse splits (ETFs)
- Reviews:

    - of equity curve
    - of trades
- Reward-to-risk ratio
- Rhea, Robert
- Risk management
    - comebacks from drawdowns
    - and emotions
        - businessman's risk
        - and counting money in open trades
        - not being able to sell
    - essential nature of
    - with futures
    - main rules of
        - 6% Rule
        - 2% Rule
    - with options
    - probabilities in
    - and self-management
    - stops for protecting winning trades
    - by trading managers
    - for trends and trading ranges
    - worst mistakes in
- Rock bottom (AA principle)
- Rorschach, Herman
- RSI, *see* Relative Strength Index
- Rule-bending

S

- SAC Capital
- SafeZone stops
- Scanning for trades
  - defined
  - defining patterns before
  - “fallen angels”
  - negative rules in
  - stocks
  - using toolboxes
- Seasonality, with futures
- Securities and Exchange Commission (SEC)
- Self-control
- Self-deception
- Self-destructiveness
  - controlling
  - gambling
  - and lack of normal human helpfulness in markets
  - self-sabotage
- Self-fulfillment
- Self-help groups. *See also* Alcoholics Anonymous (AA) principles
- Self-sabotage
- Self-test, of readiness for trading
- Sellers
  - expectations of
  - and open interest

    - of options
- Selling. *See also specific trading vehicles*
    - based on fear
    - emotional commitment in
    - indicators for, *see specific indicators*
    - by insiders
    - not being able to sell
- Sell orders:
    - Force Index indicator for
    - and Stochastic signals
- SentimenTrader.com
- Shapiro, Roy
- “Shark bite” losses
- “Shopping for indicators”
- Short interest
- Short Percent of Float
- Short sellers, rallies/declines and
- Short selling:
    - Force Index indicator for
    - making money with
    - Stochastic signals for
    - stops with
    - Triple Screen indicators for
    - value zone in
- *Shortsqueeze.com*
- Short-term Force Index
- Short-term price cycles
- Short-term timeframe

- Short-term trading
- “Shoulders”
- Sibbet, James H.
- Signal(s). *See also* Indicators
    - confidence in
    - in market moves
- Signal line (MACD)
    - crossover of MACD line and
    - difference between MACD line and
    - and MACD-Histogram
- Simple moving averages
- 6% Rule
    - and concept of available risk
    - as guideline for pyramiding
- 65-day New High–New Low Index
- Size of trades
    - Iron Triangle of risk control for
    - risk associated with
    - 2% Rule for
- Skills, learning
- Slater, Tim
- “Slicing the bid-ask spread” technique
- Slippage
    - and open interest
    - overnight gaps
    - in quiet markets
- Slow Stochastic

- Small traders
  - CFDs for
  - COT reports
  - of options
- Smoothed Directional Lines ($+DI_{13}$, $-DI_{13}$)
- Social psychology
- *Stock Market Barometer, The* (William Hamilton)
- Soft stops
- Soros, George
- Source of money, in markets
- S&P 500 index
  - applying OBV to
  - and beta
  - in scanning for trades
- Specialist Short Sale Ratio
- Speculative trading, in currencies
- Speculators
  - farmers and engineers as
  - institutional investors as
  - position limits of
- Spikes
- Spike bounce signal
- Spikers
- SpikeTrade.com
- Spreads:
  - bid-ask
    - with CFDs

        - with forex trades
        - “slicing the bid-ask spread” technique
    - futures
- Spreadsheet, for pre-open routine
- Spread trading
- Standard deviation channels (Bollinger bands)
- Steidlmayer, J. Peter
- Stochastic oscillator
    - and crowd psychology
    - time window of
    - trading rules
    - in Triple Screen trading system
- Stocks
    - liquidity of
    - margins with
    - options vs.
    - prices of
    - scanning for
    - selecting
    - short interest
    - volatility of
- Stocks above 50-day MA indicator
- StockCharts.com
- Stoller, Manning
- Stops. *See also* Protective stops
    - and Average True Range
    - avoiding obvious levels for
    - catastrophic

    - mental
    - moving in direction of trade
    - outside zone of “market noise”
    - and overnight gaps
    - placing
    - planning
    - protective
    - to protect winning trades
    - purpose of
    - trading without
    - in trends vs. in trading ranges
    - in Triple Screen system
- “Stop-and-reverse” orders
- Stress of trading, reducing
- Strike price (options)
- Success:
    - accumulating equity as hallmark of
    - barriers to
    - desire for
    - and emotional trading
    - qualities for
    - realism for
    - and self-control vs. controlling markets
    - through taking charge of your life
- Supply and demand factors:
    - with futures
    - reflected in price
- Support:

    - defined
    - from pain and regret
- Support and resistance
    - causes of
    - channels identifying
    - moving averages as
    - and profit targets
    - strength of
    - trading rules and
    - true and false breakouts
- Surges, speed and momentum of
- Surowiecki, James
- Swing trading
    - for beginner traders
    - grading trades in
    - with Impulse system
    - market data for
    - profit taking in
    - profit targets in
    - stops in
    - timeframes in
- Symmetrical channels

T

- Taking charge of your life
- TANSTAFL principle
- Taylor, Lou
- Technical analysis
  - and channels
  - computer hardware
  - Directional system
    - Average True Range indicator
    - constructing
    - crowd behavior tracked by
    - trading rules
  - as for-profit social psychology
  - with fundamentals
  - groups of indicators
    - miscellaneous indicators
    - oscillators
    - trend-following indicators
  - and insider trading
  - market data
  - miscellaneous indicators
  - Moving Average Convergence-Divergence
    - creating
    - MACD-Histogram
    - MACD Lines
    - and market psychology

    - moving averages
        - choosing length of
        - dual EMAs
        - exponential
        - and market psychology
        - simple
        - as support and resistance
        - weighted
    - objectivity of
    - oscillators
        - MACD-Histogram
        - overbought and oversold
        - Relative Strength Index
        - Stochastic
    - as poll-taking
    - prices, values, and value zone
    - for timing entries and exits
    - toolboxes for
    - trend-following indicators
        - Directional system
        - MACD Lines
- *Technical Analysis of Stock Trends* (Edwards and Magee)
- Technical analysts:
    - concept of value
    - goals of
    - identification of rallies and declines by
    - as social psychology

- Temperament
- Testing:
    - of readiness for trading
    - of trading systems
- Thinking. *See also* Fantasies
    - changing
    - and crowd mentality
    - emotions and
    - independent
    - and Losers Anonymous concept
    - wishful
- *Thinking, Fast and Slow* (Daniel Kahneman)
- TICK
- Ticks
- Tick volume
- Time
    - cycles
    - factor of five
    - indicator seasons
    - market time
- Time decay (options)
- Timeframes:
    - and factor of five
    - and kangaroo tails
    - of markets
        - analysis using multiple timeframes
        - conflicting

    - of New High–New Low Index
    - seasons in
    - in trading
        - day-trading
        - with Impulse system
        - long-term (investing)
        - options
        - swing trading
        - in Triple Screen trading system
- Time value (options)
- Time zones:
    - and market data analysis
    - trading in
- Toolboxes
- Tops. *See also specific indicators*
    - and divergences
    - reversal signals at
    - since the 1950s
    - in trends
- TR (True Range)
- Trade Apgars
- Tradebills
- Trade Journal. *See also* Trading diaries
- Trade plans
    - creating
    - scoring
    - using Tradebills

- Traders. *See also* Individual psychology; Mass psychology
  - discretionary
  - gender of
  - individual
    - competing against institutional traders
    - former institutional traders as
    - isolation of
    - one advantage over institutional traders
    - performance of institutional traders vs.
  - institutional
    - advantages for
    - performance of individual traders vs.
    - trade managers of
  - mechanical
  - odds against
    - bid-ask spread
    - commissions
    - expenses
    - slippage
    - trading as a minus-sum game
  - reasons for trading
- Trade setup
- Trading, 1–8. *See also specific topics*
  - bid-ask spreads in
  - commissions in
  - expenses of
  - and gender of traders

    - identifying A-trades
    - learning skills for
    - as a minus-sum game
    - odds against traders in
        - bid-ask spread
        - commissions
        - expenses
        - slippage
    - psychological readiness for
    - psychology of. *See also* Mass psychology; Individual psychology
    - reasons for
    - reducing stress of
    - scanning for trades
    - setting profit targets
    - setting stops
        - avoiding obvious levels for
        - catastrophic
        - moving in direction of a trade
        - outside zone of “market noise”
        - and overnight gaps
        - to protect winning trades
        - in Triple Screen trading system
    - slippage in
    - succeeding in
    - as trying to take money from other people
- Trading accounts
- Trading diaries
    - to avoid self-destructiveness

    - Trade Journal
- Trading managers
- Trading ranges
    - and conflicting timeframes of markets
    - deciding to trade or wait
    - at hard right edge
    - identifying
    - mass psychology of
    - as OBV signal
    - open interest in
    - oscillators in
    - pain and regret in
    - and Stochastic signals
    - time spent in trends vs.
- Trading rules. *See also* Risk management; *specific topics and indicators*
    - bending
    - for discretionary traders
    - for mechanical traders
- Trading scene participants
    - advisors
    - individual traders
    - institutional traders
- Trading skills, learning
- Trading software
- Trading systems/strategies
    - for A-trades
    - and autopilot fantasy

- Channel system
  - constructing
  - and mass psychology
  - standard deviation (Bollinger bands)
  - symmetrical
  - trading rules
- defined
- developed prior to scanning for trades
- discretionary traders
- frequency of signals from
- Impulse system
  - entries in
  - exits in
- key demands for trades
- to limit commissions
- for mechanical traders
- optimizing
- paper trading
- and psychological readiness to win
- simplicity of
- testing systems
- tradebills for
- Triple Screen
  - choosing timeframes
  - in day-trading
  - entry technique screen
  - market tide screen
  - market wave screen

        - stops and profit targets in
        - trend-following indicators and oscillators
- Trading timeframes
    - day-trading
    - long-term (investing)
    - swing trading
- Trading vehicles. *See also individual vehicles*
    - contracts for difference
    - exchange-traded funds
    - forex
    - futures
        - and commitments of traders
        - compared to cash trades
        - contango
        - floors and ceilings
        - hedging
        - inversions
        - margins and risk control with
        - seasonality with
        - spreads
        - supply and demand factors with
    - liquidity of
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    - options
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        - limiting risk with
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        - writing
    - scanning for
    - stocks
    - and time zones
    - volatility of
- Trailing stops
- Trends. *See also* Downtrends; Uptrends
    - advisors' following of
    - and conflicting timeframes of markets
    - created by crowds
    - deciding to trade or wait
    - defined
    - effect of support or resistance on
    - and factor of five
    - in futures markets
    - at hard right edge
    - health of
    - identifying
    - on long-term charts
    - moving averages indicating
    - NH-NL
    - and objective signals for trades
    - and oscillator levels
    - psychology of
        - emotions in
        - and mass psychology
        - price shocks
        - rallies and declines

        - and social psychology
    - and Stochastic signals
    - time spent in trading ranges vs.
    - timing of trades and
    - and volume of trading
- Trend-following indicators
    - Directional system
    - MACD Lines
    - in Triple Screen trading system
- Trendlines:
    - diagonal
    - subjectivity of
- TRIN
- Triple bullish or bearish divergences
- Triple Screen trading system
    - choosing timeframes
    - in day-trading
    - entry technique screen
    - Force Index in
    - market tide screen
    - market wave screen
    - objective of
    - Stochastic signals in
    - stops and profit targets in
    - trend-following indicators and oscillators
- True breakouts
- True Range (TR)
- Tulip Mania

- 12-step programs
- *Twelve Steps and Twelve Traditions* (AA)
- 20-day New High–New Low Index
- 2% Rule
  - in futures markets
  - as a guideline for pyramiding
  - for institutional traders
  - and Iron Triangle of risk control
- *Two Roads Diverged: Trading Divergences* (Alexander Elder)
- Tyson, Mike

U

- Uncertainty
- Undecided traders
- Undercapitalization myth
- U.S. stock market:
  - price cycles in
  - trends in
- *Unstuff Your Life* (Andrew J. Mellon)
- Upside penetration
- Uptrends
  - bearish divergences during
  - channel trading during
  - crowd behavior creating
  - Force Index indication of
  - identifying
  - Impulse system in
  - mass psychology of
  - NH-NL
  - open interest during
  - overbought oscillators in
  - pain and regret in
  - perfect
  - at resistance level
  - signals in
  - and Stochastic signals
  - stocks above MAs in

    - Triple Screen indicators for buying in
    - and volume of trading
    - volume spikes in
- Urge to trade

V

- Value(s):
  - consensus of:
    - on MACD-Histogram
    - moving averages as
    - price as
    - and trades above/below EMA
  - of options
  - prices vs.
- Value zone
- Vince, Ralph
- Volatility
  - ATR lines showing
  - and channel width
  - measuring
- Volatility index
- Volatility stops
- Volume
  - crowd behavior reflected in
  - and crowd psychology
  - “high” and “low,”
  - and liquidity
  - measuring
  - moving average of
  - of penny stocks
  - in support and resistance zones

    - and true vs. false breakouts
    - volume-based indicators
        - Accumulation/Distribution
        - Force Index
        - On-Balance Volume
        - open interest
- Volume-based indicators
    - Accumulation/Distribution (A/D)
        - and crowd behavior
        - trading rules
    - Force Index
        - constructing
        - intermediate-term
        - short-term
        - and trading psychology
        - trading rules
    - On-Balance Volume
        - and crowd psychology
        - trading signals
    - open interest
        - and crowd psychology
        - trading rules

W

- Wall Street
- *Wall Street Journal The,*
- Watch list, building
- Weekly charts. *See also* Timeframes; *individual indicators*
- Weekly New High–New Low Index
- Weekly Stochastic
- Weighted moving averages (WMAs)
- Weissman, Richard
- Whipsaws
- Wilder, J. Welles, Jr.
- Williams, Larry
- *Winner Take All* (William R. Gallacher)
- Winning. *See also* Success
    - bending the rules after
    - desire for
    - difficulty of
    - and emotional trading
    - essential components for
    - and self-control vs. controlling markets
    - by taking charge of your life
    - and volume of trading
- Wisdom of crowds
- *Wisdom of Crowds, The* (James Surowiecki)
- Wishful thinking
    - with classical charting

    - giving trades “more room” as
    - and stops
- Worldwide crowds
- Writing options

Y

- Yahoo Finance

Z

- Zero-sum game:
  - forex market as
  - trading as

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